

BLM National Petroleum Reserve in Alaska
Northeastern NPR-A Regional Mitigation Strategy
Workshop #2

September 24-25, 2015
Barrow, Alaska

As of December 14, 2015, the following comment letters have been received in response to the September 2015 Workshop #2 materials and the final workshop summary.

COMMENT LETTER FROM ALASKA WILDERNESS LEAGUE, CONSERVATION LANDS FOUNDATION,
NORTHERN ALASKA ENVIRONMENTAL CENTER, SIERRA CLUB, AND THE WILDERNESS SOCIETY
NOVEMBER 5, 2015

**Alaska Wilderness League • Conservation Lands Foundation •
Northern Alaska Environmental Center • Sierra Club •
The Wilderness Society¹**

Bud C. Cribley, State Director
Bureau of Land Management
Alaska State Office
222 West Seventh Avenue, #13
Anchorage, Alaska 99513

5 November 2015

**Re: National Petroleum Reserve-Alaska Regional Mitigation Strategy geographic scope
and proposed mitigation actions**

Dear Mr. Cribley,

We appreciate the Bureau of Land Management (BLM) taking the time and effort to complete an effective Regional Mitigation Strategy (RMS or Strategy) for the northeastern region of the National Petroleum Reserve – Alaska (NPR-A or Reserve). As we have communicated to you previously, this undertaking is an important and necessary step to ensure that conservation and subsistence values are protected while allowing responsibly-sited energy development.

It is necessary for BLM to set a course through the RMS for truly balanced management of the NPR-A. BLM's decision for the Greater Mooses Tooth One (GMT-1) project compromised the integrity of the 2013 Integrated Activity Plan by allowing infrastructure within the Fish Creek setback. In the future, it will be crucial for BLM to ensure that all setbacks and Special Area designations are protected as projects move forward. As the Record of Decision (ROD) describes, GMT-1 will have major impacts to subsistence, environmental justice, and socio-cultural resources, which are all directly connected to the surrounding landscape.² The RMS is an opportunity for BLM to improve management by ensuring that areas important for subsistence practices, fish and wildlife habitat, and traditional and cultural values are protected.

In this letter, we share some thoughts about geographic scope and mitigation actions. We begin with a series of foundational principles relating to the RMS boundary. From here, we offer our reaction to BLM's original boundary presented at the September 24th workshop in Barrow, Alaska. While we are aware that BLM intends to change this map, we feel it is still necessary to explain why the Bureau's original boundary is deficient and warrants significant expansion. In the latter portions of this letter, we present a series of proposed mitigation actions that we believe

¹ Letter prepared with assistance from Trustees for Alaska.

² 2014 Alpine Draft Supplemental Environmental Impact Statement. Vol. 3, p. 173.

BLM should use to improve the stewardship of the NPR-A so that designated Special Areas and special values are protected.

I. Geographic Scope

The geographic scope is one of the most important elements of the RMS. This boundary must incorporate impacted areas, locations where future impacts may occur, high value conservation and subsistence areas where developments' impacts can be offset, and areas that are necessary to ensure ecosystems function in a warmer and unknown future. Without all of these features, the objectives and goals of mitigation policies and practices cannot be achieved.

The RMS geographic scope and its associated purpose must be effectively and clearly explained to the public. BLM should take additional, proactive measures to explain to all stakeholders the importance of a true landscape-level approach and the benefits this approach has for impacted communities, subsistence values, and development. Efforts should also be made to steer the conversation away from money and potential financial gains that may result from mitigation fees. This focus is distracting and counterproductive to the goals of developing the Strategy. Moreover, BLM should resist pressures to interpret language pertaining to the Strategy's boundary within the ROD in a restrictive way. The RMS needs to be broad and cover a significant area if it is going to be effective and achieve its overarching goals.

Below we offer a series of concepts that BLM should consider when revisiting the NPR-A's geographic scope. These concepts complement the maps and rationale that The Wilderness Society provided to BLM on July 17, 2015 and that are included in Appendix A. Foundational and guiding principles that BLM should use to define the Strategy's geographic scope include the following:

A: Foundational Principles

1. Secretarial Order 3330

- Secretary Jewell's October 2013 Order³ is the administrative foundation for creating the NPR-A's Regional Mitigation Strategy. This document is specifically referenced and described within the GMT-1 ROD. A core principle of this directive is for federal natural resource agencies, such as the BLM, to take a true landscape-level approach⁴ to improve the stewardship of public lands.
- A primary purpose of Secretarial Order 3330 is to facilitate investment in key conservation priorities in the face of climate change. To ensure this objective, BLM's geographic scope should be large enough to capture current high value conservation areas, as well as locations that may be important for conservation in an uncertain and warmer future.

³ Available at: <https://www.doi.gov/sites/doi.gov/files/migrated/news/upload/Secretarial-Order-Mitigation.pdf>

⁴ BLM itself has indicated that landscapes are large, connected geographical regions and that a landscape-level approach should take into consideration ecological values and patterns that may not be apparent on a smaller scale. The geographic area encompassed by the Strategy should reflect this broad-based understanding of what it means to plan at a landscape level. See: http://www.blm.gov/wo/st/en/prog/more/Landscape_Approach.html.

2. Integrated Activity Plan (IAP)

- The NPR-A's 2013 Integrated Activity Plan, the first Reserve-wide plan ever completed, was a monumental undertaking for the Department of the Interior. This effort took millions of dollars and years to complete. However, after only two years, BLM seems to have steered away from adhering to or constructively utilizing this plan. Specifically, and as we will discuss at greater length below, BLM's proposed mitigation boundary breaks-up the established Teshekpuk Lake and Colville River Special Areas.
- Special Area boundaries and buffers around important waterways were designated within the IAP for their high conservation and subsistence values. BLM should be constructively utilizing these boundaries to effectively and efficiently complete the RMS.

3. Greater Mooses Tooth One Record of Decision

- While the GMT-1 ROD left the Strategy's precise geographic scope undefined, there is considerable language that informs how it should be drawn.
- In numerous places, the ROD refers to and defines the general geographic scope of the RMS as the "Northeastern NPR-A region." The BLM has used this terminology during three different planning periods (1998, 2003-2006, and 2008) to capture many of the Reserve's landscape-level values.
- The ROD also says: "The RMS will serve as a roadmap for mitigating impacts from GMT-1 and future projects enabled or assisted by the existence of GMT-1." Some stakeholders are incorrectly focusing only on the direct physical effects of GMT-1 and have suggested that the scope of the RMS be limited by this provision. However, the most important element in this sentence is the word *impacts*. Impacts from GMT-1 go well beyond the footprint of the project and in most cases span the landscape. Furthermore, impacts from future projects enabled by GMT-1 will greatly expand the reaches of the impacts from GMT-1 across the landscape. The ROD identified the Strategy's objectives as including continued access to subsistence use areas and maintenance of functioning habitat to sustain fish and wildlife species abundance and distribution. To achieve these objectives, BLM will have to consider impacts and mitigation on a broad, landscape level. BLM should focus on how development will have significant effects across the landscape and take into account the broad geographic scale necessary to adequately offset the impacts identified in the GMT-1 ROD, including major impacts to subsistence.
- BLM has sold 212 leases in the NPR-A, the majority of which are in the northeastern region of the NPR-A. More leases will be sold very soon. It is difficult to assess at this time the development of how many of these leases would be enabled by GMT-1. Including the vast majority of these leases that are in the northeast region of the NPR-A should be a foundational tenet of the RMS's geographic scope.

4. Science-Based Decision-Making

- When defining the geographic scope of the RMS, the best-available science should be used to ensure inclusion of areas that are necessary to maintain ecosystem function,

habitat connectivity, and climate change resilience.⁵ It should be noted that to achieve this on a per acre basis, more lands must be devoted to conservation than to development to maintain ecosystem processes, function, and subsistence resources.

- Ecological processes such as hydrology and species migration occur across vast spatial scales in the Arctic and a true landscape-level mitigation strategy should include a geographic scope broad enough to encompass these processes.

5. Exploration, Development, and Conservation

- As mentioned above, in order for the RMS to be a “forward thinking” document, exploration, development, and conservation areas need to be captured within BLM’s geographic scope.
- The diversity and scale required to capture these values will require a substantial land area.

6. Subsistence

- Many subsistence resources in Arctic Alaska require a landscape to complete their life cycles, be self-sustaining, and abundant enough to allow for significant harvest levels. The Western Arctic and Teshekpuk caribou herds, as examples, occupy and utilize major areas on the North Slope to calve, find insect relief, and to migrate, forage, and overwinter. Similarly, aquatic systems that permeate the entire region support a variety of highly migratory fish species that are important subsistence resources (e.g., broad white fish). These fish require features throughout the watersheds to overwinter, feed, and breed. Without an intact ecosystem, subsistence practices would not be possible.
- The Alaska National Interest Lands Conservation Act (ANILCA) and the State of Alaska Constitution, among other laws, protect subsistence resources and practices. ANILCA also protected and conserved entire ecosystems in the conservation system units established by the law. This is a great model for planning on a landscape scale to allow for the continuation of subsistence activities and access to subsistence resources.

B: BLM’s Working Draft Proposed Boundary

What follows is a discussion of BLM’s rationale for its proposed NPR-A Regional Mitigation Strategy boundary, as presented at the September workshop in Barrow, Alaska. While we know that BLM is revisiting its original geographic scope, below we offer a detailed review of BLM’s reasoning to date.

1. High potential for oil development

Including the “high potential” area for economically recoverable oil is an important feature to incorporate in the Strategy’s proposed geographic scope, but should not be used to define the southern extent of the RMS boundary. The “high potential” area has already been heavily impacted by exploratory activities and it is likely to be further impacted by commercial production in the coming years. Only focusing on exploratory wells fails to capture the potential

⁵ Mawdsley, J.R., R. O’Malley, and D.S. Ojima. 2009. A review of climate-change adaptation strategies for wildlife management and biodiversity conservation. *Conservation Biology* 23: 1080-1089.

for other, future developments on the landscape. There are currently 212 active leases within the NPR-A and BLM is holding another lease sale in November. The vast majority of these tracts, which were sold by BLM with the fundamental intent of discovering and producing oil, should be within the BLM's proposed boundary. Defining the southern extent of the geographic area based on the oil and gas potential also arbitrarily excludes areas that are important for fish and wildlife habitat, subsistence, or other uses, and where BLM has the opportunity to achieve meaningful conservation gains. Without including these lands, the goals of the RMS can easily be undermined.

It is important to note that the proposed BLM geographic scope unveiled at the RMS Workshop in Barrow failed to include two exploratory wells, Cassin 1 and Cassin 6. These wells were drilled by ConocoPhillips Alaska Inc. in the Bear Tooth Unit. This unit will also likely be "enabled" by the development of GMT-1.

2. Areas around Smith Bay

The inclusion of Smith Bay is a strong feature of BLM's proposed boundary. Exploration and potential development in this sensitive region has the potential to seriously impact imperiled species like the federally threatened Polar Bear, important subsistence resources like the Teshekpuk Caribou Herd, and the globally significant avian values of this Special Area. However, the area around Smith Bay also includes a number of stranded leases and exploratory well sites that were not included in BLM's geographic scope. We encourage BLM to broaden its geographic scope to capture these features and to include the entire Teshekpuk Lake Special Area in the Strategy's boundary.

3. "Right Size"

We believe that the "right size" for the RMS is based on a true landscape-level approach using the best available science. We are troubled that the rationale of this section is subjective and based on a flawed understanding of what it takes to effectively manage a complex and interconnected Arctic landscape, particularly in a changing climate.

4. Variety of ownership types

Including a variety of land ownership types is an excellent idea to include in the geographic scope. As we have discussed before, many of the Arctic's conservation and subsistence values, such as watersheds and highly migratory caribou, exist across political boundaries. Moreover, including lands of various jurisdictions offers unique and potentially novel opportunities to use mitigation funds to holistically steward the landscape.

Nevertheless, the politics of working across jurisdictions can often be challenging. While we support BLM's ability to find cross-boundary solutions, we also encourage BLM to take advantage of the large area of land under its own jurisdiction. The NPR-A is the largest federal land management unit in the nation and presents BLM with a unique opportunity to easily take a landscape-level approach.⁶ And though it would be more complicated, offshore waters overseen by the Department of the Interior should be considered as those areas may be less challenging than acreage not overseen by Interior.

⁶ See: http://www.blm.gov/wo/st/en/prog/more/Landscape_Approach.html

5. Itkillik River and the Kuparuk River Unit

BLM's rationale for specifically including these features is unclear. The Itkillik River is a major tributary of the Colville River and is an important subsistence use area for residents of Nuiqsut. This area is worthy of protective mitigation actions. The Kuparuk River Unit, on the other hand, has already been extensively developed. This industrialization has compromised a core area of Nuiqsut's cultural landscape and has little to contribute to the goals of the RMS. Again, while we support BLM's cross-boundary efforts, we encourage BLM to first take advantage of the large area under its own management.

6. Core Teshekpuk Lake Special Area, Teshekpuk Herd habitat, and caribou corridors

We appreciate BLM recognizing the importance of the Teshekpuk Lake Special Area, the Teshekpuk Caribou Herd, and necessary migratory corridors. These are extremely valuable features of the landscape that are important for subsistence and conservation purposes. However, to effectively steward these lands and resources, a much larger area needs to be covered within BLM's geographic scope.

As mentioned above, BLM should not be compromising existing management boundaries. The whole Teshekpuk Lake Special Area, as defined within the 2013 IAP, should be included within the RMS. While BLM's inclusion of the "core area" is noteworthy, it is likely that the significance of this area will be changed in a warmer future. To hedge against these unknowns, large areas should be reserved to allow for effective adaptation in the region.

The animals of the Teshekpuk Caribou Herd are highly migratory and an incredibly important subsistence resource for communities of North Slope, particularly Nuiqsut and Anaktuvuk Pass. A portion of the herd moves southeast in the fall to overwinter in the Brooks Range and most migrating animals pass through the Colville River Special Area between Nuiqsut and Umiat.⁷ The BLM's proposed boundary fails to recognize an opportunity to take proactive measures to ensure continued caribou movement. Specifically, a large area of unleased lands north of Umiat and along the Kikiakrorak, Kogosukruk, and Colville Rivers is not included within BLM's boundary. The RMS should capture these and similar lands as they are necessary for caribou movement and worthy of protective actions.

7. Umiat

BLM's rationale reads: "If development occurs near Umiat, the BLM believes it would merit another, separate Regional Mitigation Strategy that would encompass areas used by Anaktuvuk Pass hunters as well as Nuiqsut hunters." This reasoning is problematic for a number of reasons.

Firstly, waiting for development to occur around Umiat fundamentally ignores the purpose of a Regional Mitigation Strategy, an effort to get ahead of developments' unavoidable impacts. By waiting for the impacts of development, BLM misses the opportunity to holistically manage the landscape and to better guide where and how development occurs. Moreover, there is reason to believe that development near Umiat is not far off. In June 2015 Linc Energy publicly outlined a program to potentially build 13 drilling pads for 150 wells in the region. This development plan was reaffirmed in the October 18, 2015 issue of *Petroleum News* where Linc Energy expressed a

⁷ Person, B.T., Prichard, A.K., Carroll, G.M., Yokel, D.A., Suydam, R.S., and George, J.C. 2007. Distribution and movements of the Teshekpuk caribou herd 1990-2005: Prior to Oil and Gas Development. *Arctic* 60:238-250.

desire to begin development by 2022.⁸ With such development potential on the horizon, it would be wise for BLM to use a watershed-based approach - a core principle of sound environmental management that should be incorporated in a landscape-level plan - and include this area within the RMS.

Secondly, despite referencing Nuiqsut hunters, BLM's rationale for not including this region is contradictory to one of the primary reasons why this Strategy is being completed. As described in the ROD, GMT-1 was found to have major impacts on Nuiqsut's subsistence practices. BLM's exclusion of the Umiat area fails to consider how the region's systems and resources span the landscape and often connect communities of the region. From an ecosystem management and subsistence perspective, Nuiqsut and Anaktuvuk Pass are closely connected by the Colville River watershed and the Teshekpuk Lake Caribou Herd. With expanding development to the north and east of Nuiqsut, it will be increasingly important to ensure that there are protections for key subsistence areas to the west and south. As such, it would make sense for these values to be effectively and completely captured by the RMS.

8. GMT-1 Impact Area

A footnote within BLM's rationale for the Strategy's boundary references where the compensatory mitigation dollars from GMT-1 will be spent. Within this description, BLM defines the impacted area as 2.5 miles from the GMT-1 drill pad, road, and pipeline, and the City of Nuiqsut. This distance is arbitrary and fails to capture the natural and social values that have been impacted by the GMT-1 project.⁹ For example, Fish Creek, an important subsistence use area for the community of Nuiqsut, would only minimally be captured by this distance. At its closest point, the planned GMT-1 project is 2.5 miles from the river. This distance would not cover the far bank or any significant distance up or down stream. BLM should look more holistically at impacted values across the landscape before assigning distances that may not effectively capture the goals and objectives of the RMS. Additionally, it is only appropriate to include a much larger area to address subsistence and wildlife values because factors such as noise, air pollution, and aviation go well beyond the immediate "footprint" of the development.

II. Mitigation Actions

Future land management decisions have the potential to further compromise the region's conservation and subsistence values. What follows are a series of purposed mitigation actions that BLM should use to improve its stewardship of the landscape to ensure subsistence resources and practices.

1. Conservation Easements / Rights-of-Way

To effectively offset the significant unavoidable impacts that development will have on the landscape, the use of conservation easements and rights-of-way (a form of easement) should be employed. These easements, which should last the life of the development's impact or in

⁸ See: <http://www.petroleumnews.com/pntruncate/239171327.shtml>

⁹ We encourage BLM to have greater transparency about how and why such determinations are made.

perpetuity¹⁰, would be held by an entity outside of the federal government to ensure conservation durability. We propose that easements be used on high conservation lands, including the Teshekpuk Lake and Colville River Special Areas. The size of areas protected by easements would proportionally compensate for the significant landscape-level disturbance that oil production activities have on subsistence and conservation values in the region.

2. Lease Buybacks

A significant amount of high conservation and subsistence value land has been leased by BLM. These lands include important subsistence use areas around Nuiqsut, vulnerable aquatic systems, the Colville River Special Area, and migratory caribou corridors between the Teshekpuk Lake Special Area and the Brooks Range. Additionally, as mentioned earlier, there are currently three stranded leases within the Teshekpuk Lake Special Area; and these leases are incompatible with the values of this management unit. Mitigation funds should be used to buyback leases in important areas so that necessary landscape processes are protected and managed in a holistic manner.

3. Special Area Management Plans

To improve the stewardship of the NPR-A's Special Areas, BLM should utilize mitigation funds to complete formal management plans for the Teshekpuk Lake and Colville River Special Areas. While the 2013 IAP established these areas for their high conservation and subsistence values, this document did not offer formal management prescriptions and resource management goals. In the face of increasing development pressures and climate change, these plans would help BLM more actively manage the landscape to ensure ecosystem health and subsistence resources into the future.

4. Monitoring and Adaptive Management

In the face of increasing oil development and the unknown effects of a changing climate and coastal erosion, BLM will need to effectively monitor and adaptively manage the NPR-A. These efforts, which can be enhanced through compensatory mitigation funds, will help to evaluate the effectiveness of mitigation actions in light of compounding impacts and ensure that necessary management changes are made to steward the Reserve's natural resources.

We would appreciate the opportunity to discuss the above mentioned topics and the Regional Mitigation Strategy with you at your earliest convenience. Thank you for considering these concepts and please let us know if you have any questions.

Sincerely,

Kristen Miller
Conservation Director
Alaska Wilderness League

Lindsey Hajduk

¹⁰ The Army Corps of Engineers 2008 Wetlands Mitigation Rule, 33 CFR Parts 325 and 332, for example, requires preservation options to be permanent.

Alaska Program Director
Conservation Lands Foundation

Jessica Girard
Program Director
Northern Alaska Environmental Center

Alli Harvey
Our Wild America Alaska Campaign Representative
Sierra Club

Nicole Whittington-Evans
Alaska Regional Director
The Wilderness Society

Cc: Jan Caulfield
Molly Cobbs
Steve Cohn
Mike Dwyer
Stacy Fritz
Joshua Hanson
Stacie McIntosh
Matthew Preston
Tahnee Robertson
Bob Sullivan
Serena Sweet
Jason Taylor

Appendix A

Proposed Geographic Scope: A Series of Maps and Memos¹¹

¹¹ Originally submitted by The Wilderness Society on July 17, 2015

DRAFT FOR CONSIDERATION

Defining the Regional Mitigation Strategy's Geographic Scope Northeast National Petroleum Reserve - Alaska

This document provides a discussion of the principles, considerations, and values that went into defining the proposed Regional Mitigation Strategy geographic area for the first attached map (“**Map #1**”). This geography builds on the information provided to Assistant Secretary Mike Connor and BLM in October, 2014¹, BLM’s Northeast Integrated Activity Plan efforts in 1998, 2005, and 2008 and the 2013 NPR-A Integrated Activity Plan. The defined federally-managed land area is approximately 8.2 million acres in size, roughly one-third of the Reserve. Such an area offers a true landscape-level approach, while also allowing for opportunities to refine planning efforts to ensure habitat connectivity, ecosystem function, and responsibly-sited development. While the depicted region is solely on BLM administered lands, we recognize the importance of managing resources across jurisdictional boundaries and efforts should be made through the Regional Mitigation Strategy to achieve this stewardship standard.¹ Below are the specific features of the proposed geographic area that were incorporated into the creation of this map:

Subsistence Use Areas - As noted on the image, this region takes into account Nuiqsut’s contemporary subsistence use areas (1994-2003) within the NPR-A. This area was defined by Braund & Associates and incorporated into the 2014 GMT-1 Draft SEIS. The impacts to subsistence resources and practices are some of the primary reasons for the development of the Regional Mitigation Strategy.

Special Areas - Both the Teshekpuk Lake and Colville River Special Areas as defined in the 2013 NPR-A IAP are incorporated into this region. These tracts were designated for their high ecological and subsistence values. The Teshekpuk Lake and the Colville River Special Areas provide globally significant migratory bird habitat and important waterfowl resources and key habitat for caribou - all important resources for subsistence harvest. Special Areas warrant improved management standards to ensure resource protection. Areas of the Teshekpuk Lake Special Area are currently being used to support exploratory drilling in Smith Bay, marine waters under State of Alaska jurisdiction. The inclusion of these Special Areas within the geographic area captures these types of actions, as well as leasing and development activities that are permitted within parts of the Teshekpuk Lake Special Area and within the entire Colville River Special Area.

Development Activities - This region includes the Greater Mooses Tooth and Bear Tooth Units, the only two defined development units within the Reserve. The Greater Mooses Tooth Unit includes the location of the first and likely second commercial production sites within the NPR-A, GMT-1 and GMT-2. The Bear Tooth Unit includes two wells spud in 2013, Cassin 1 and Cassin 6. Linc Energy’s Umiat 23H and Umiat 18 wells are also incorporated. This geographic area also includes 191 out of the 212 (90%) authorized leases currently held within the NPR-A. Inclusion of these units and leases will help to capture both exploratory activities, such as

¹ See provided document: Alaska Wilderness League et al., “Conservation Leaders Meeting with Assistant Secretary Mike Connor”, Wednesday, October 22, 2014, Anchorage, Alaska.

DRAFT FOR CONSIDERATION

seismic testing and exploratory drilling, and potential future development locations. (*For additional information see “Development Activities on the Landscape” and “Map #3”.*)

Watersheds - Sound landscape-level environmental management must include complete watersheds. The aquatic systems of the NPR-A support many anadromous and highly migratory species of fish that are important subsistence resources. As such, watersheds must be managed holistically and not fragmented or compromised by haphazard planning efforts. This proposed geographic area captures the entire Ikpikpuk River watershed.

Caribou - The Teshekpuk Lake caribou herd is an extremely important subsistence resource that utilizes a considerable area of the North Slope to complete its life cycle. While the proposed geographic area does not capture these animals' entire range, the herd's calving location and a considerable amount of insect relief, late summer, and winter habitat are included within this region. See below for complementary Teshekpuk caribou herd maps from Person et al., 2007.

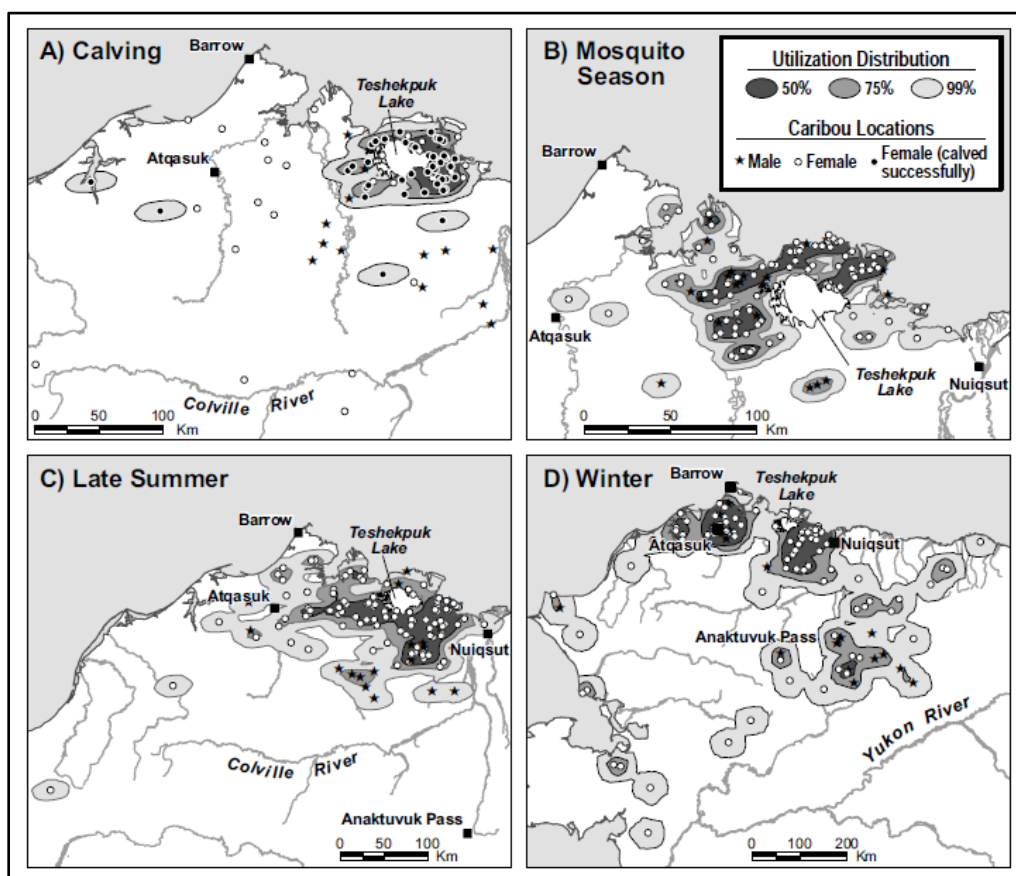
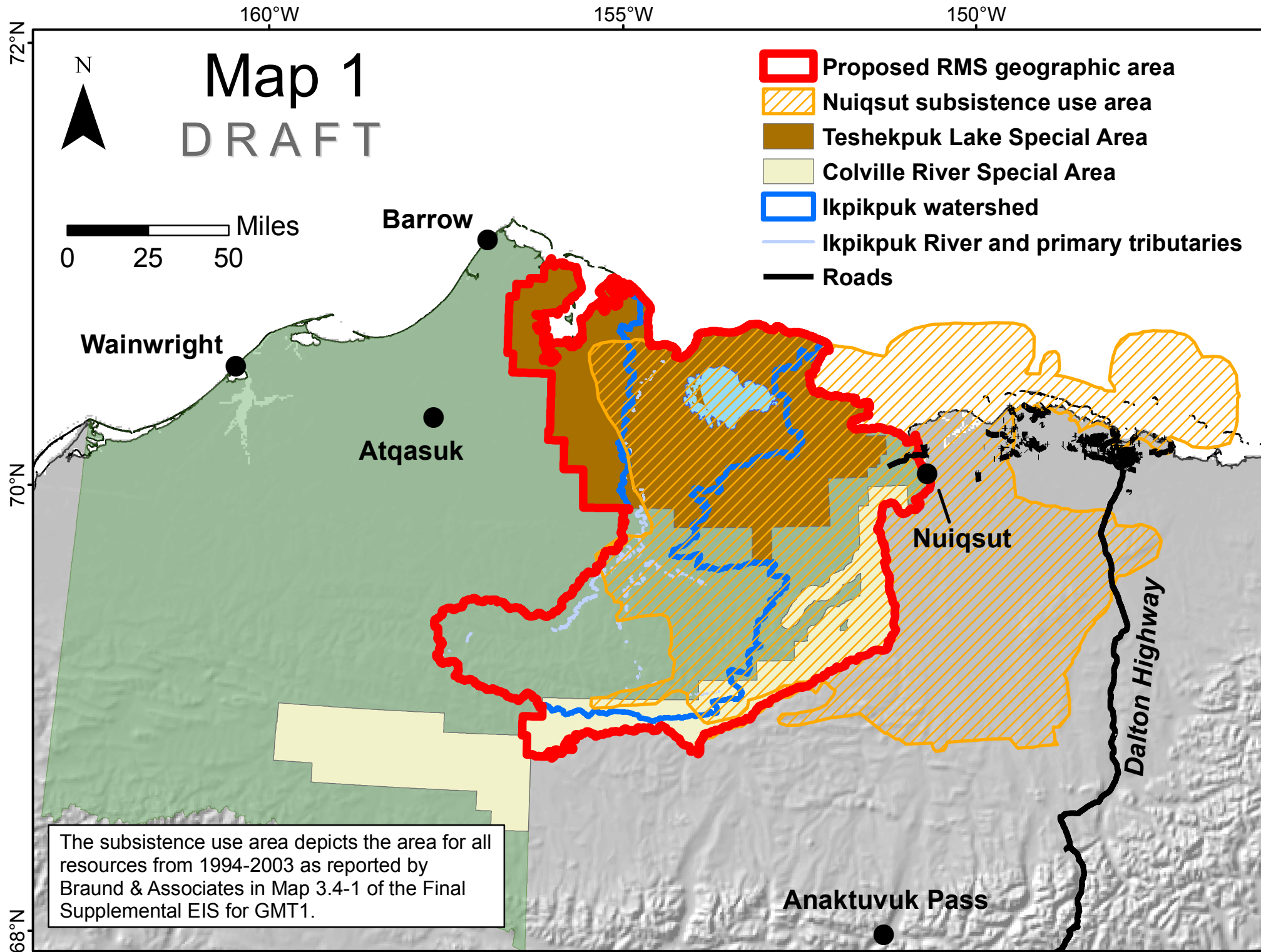


FIG. 3. Kernel utilization distribution (50%, 75%, and 99%) of caribou from the TCH as measured by satellite and GPS collars between 1990 and 2005. Figure panels represent: A) the calving season (1–15 June), B) mosquito harassment season (1–15 July), C) late summer (8 August–15 September) and, D) the winter season (1 December–15 April).

ⁱ The State of Alaska is currently working on a North Slope Management Plan. This effort includes a significant land area to the east and southeast of the NPR-A and contains important migratory corridors for caribou and a majority of the upper reaches of the Colville River watershed. For more information, see the state's website at: <http://dnr.alaska.gov/mlw/planning/mgtplans/nsmp/>. Also, “Map #2” offers a perspective of how Nuiqsut's subsistence use area, the Teshekpuk Caribou Herd, and the Colville River watershed all cross multiple management jurisdictions.



160°W

155°W

150°W

N

Map 2

DRAFT

 Nuiqsut subsistence use area TCH late summer range TCH southeast winter range Colville River watershed Roads Federal Native StateMiles
0 25 50

Wainwright

Barrow

Atqasuk

Nuiqsut

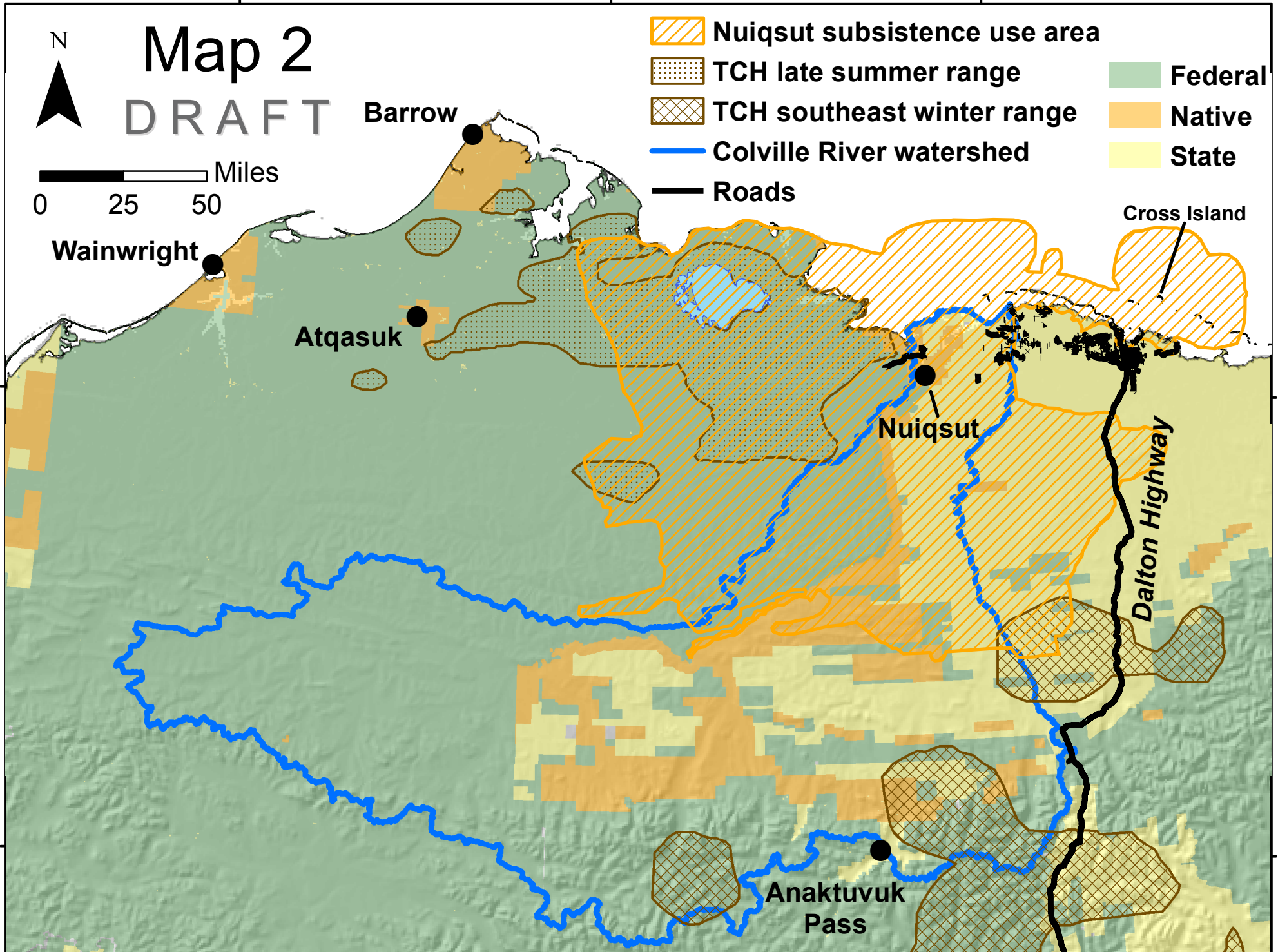
Cross Island

Dalton Highway

Anaktuvuk
Pass

70°N

68°N



DRAFT FOR CONSIDERATION

Development Activities on the Landscape National Petroleum Reserve – Alaska

What follows is a detailed description of **Map #3**'s features. This document provides a brief overview of the exploration and development activity currently occurring within and around the NPR-A. The proposed Regional Mitigation Strategy (RMS) geographic area and additional areas of mitigation importance are both depicted on this map. The additional areas of mitigation importance, defined by the hashed red line, build-off of Maps #1 and Map #2. This area captures ecological and social values that exist across political boundaries where energy development is also occurring.

Active NPR-A Leases – The lease tracts depicted on this map were obtained from the BLM website last updated in March, 2015. There are currently 212 active leases within the NPR-A and 191 (90%) fall within the proposed geographic area. Seismic surveys and exploratory activities are permitted within all of these tracts. Within the NPR-A, approximately 1.4 million acres of active federal leases are within Nuiqsut's subsistence use area. The 2015 oil and gas lease sale will likely add additional lands to this area.

Greater Mooses Tooth Unit – This unit contains the first, and what will likely be the second, commercial production projects within the NPR-A, Greater Mooses Tooth One (GMT-1) and Greater Mooses Tooth Two (GMT-2). The road from Colville Delta Five (CD-5) to GMT-1 has been approved by the Army Corps of Engineers and BLM. The road from GMT-1 to GMT-2 was digitized from Map 4.6-1 (pdf page 59) in the GMT-1 Final Supplemental Environmental Impact Statement. A portion of this unit is within the defined borders of the Teshekpuk Lake Special Area.

Bear Tooth Unit – This formally defined development unit is entirely within the borders of the Teshekpuk Lake Special Area. This area includes two wells spud in 2013: Cassin 1 and Cassin 6. The potential road from GMT-1 to Cassin 1 and 6 is based on the most probable route that the industry will take based on directness (cost) and physical features of the landscape.

Umiat – In 2013 and 2014 Linc Energy drilled two exploratory wells near Umiat. In June 2015, the Australian company publicly outlined a program to potentially build 13 drilling pads for 150 wells by 2021 in the region.

Federally-Administered Offshore Waters – Depicted in dark pink, this map captures all of the offshore leases administered by the Bureau of Ocean Energy and Management (BOEM) in the Beaufort Sea. Many of these leases fall within Nuiqsut's offshore subsistence use area.

Active State of Alaska Leases – As can be seen in light and dark blue, there are many onshore and offshore state leases on the northeastern edge of the NPR-A. These leases include recent activities, which are depicted by a yellow diamond, by Repsol (Nanushuk), Caelus Energy (Nuna), Brooks Range Petroleum (Mustang) and ConocoPhillips (Shark

DRAFT FOR CONSIDERATION

Tooth). Moreover, this map captures the State of Alaska administered waters of Smith Bay. Exploratory activities for oil are currently being purposed by NordAq Energy in this coastal area. The yellow diamond identifies the approximate location of the permitted exploratory drilling site called Tulimaniq. As mentioned in accompanying material, BLM-administered lands and waters of the NPR-A are being used to support these activities. Specifically, winter trails have crossed through important caribou habitat within the Teshekpuk Lake Special Area and sensitive coastal areas are being used to stage and support drilling operations just offshore.

160°W

155°W

150°W

Map 3

DRAFT



Proposed RMS geographic area



Additional areas of mitigation importance



Federal leases



State leases



Greater Mooses Tooth unit



Bear Tooth unit



Relevant oil and gas activity



Wainwright

Atqasuk

Barrow

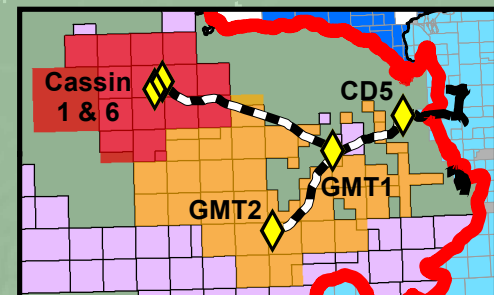
Nuiqsut

Anaktuvuk Pass

Miles
0 25 50

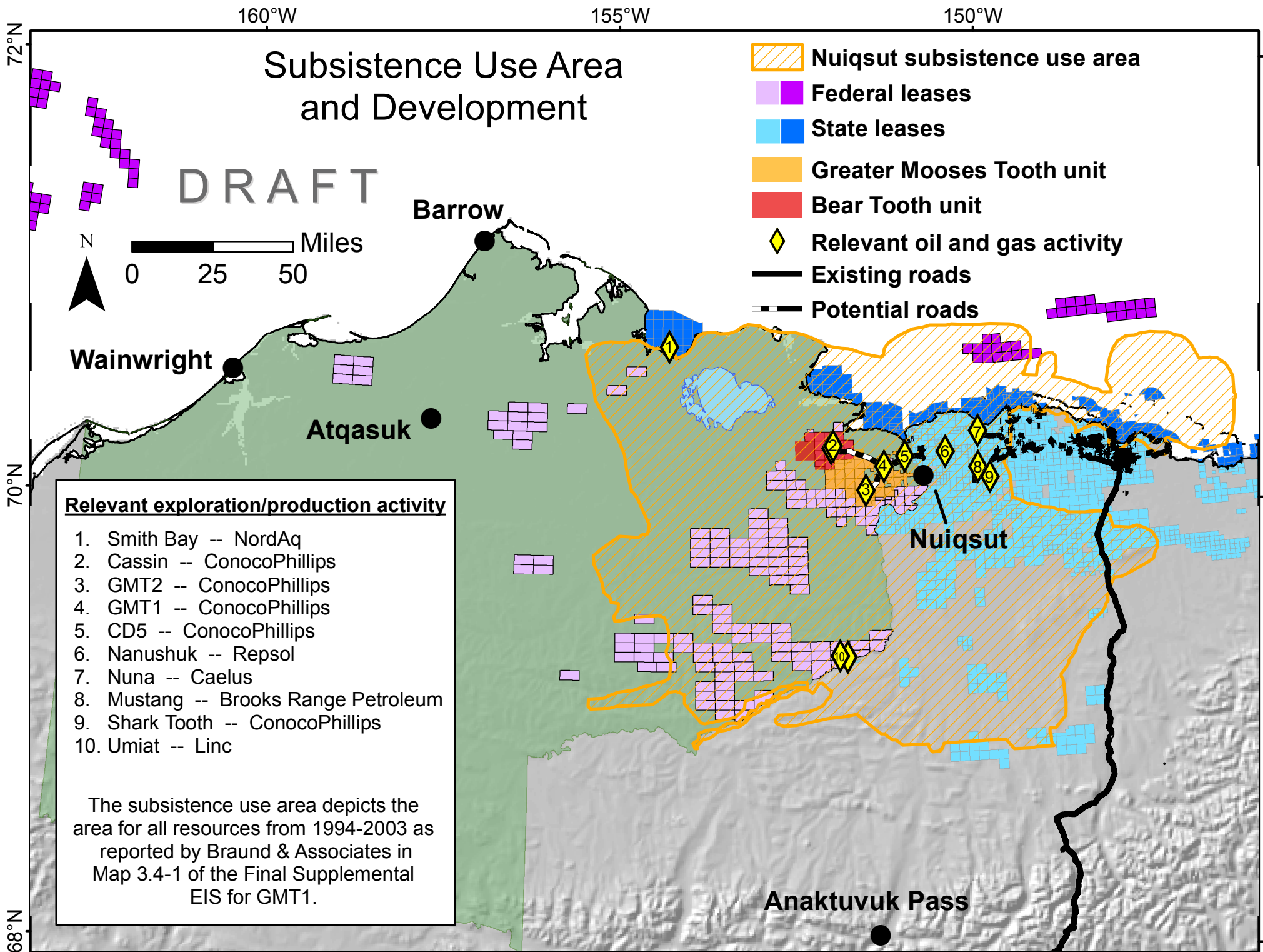
70°N

68°N



Existing roads

Potential roads



COMMENT LETTER FROM INUPIAT COMMUNITY OF THE ARCTIC SLOPE (ICAS)
NOVEMBER 10, 2015

**Comments from Colleen Akpik-Lemen, ICAS
November 10, 2015**

Regional Mitigation Strategy

The RMS process and the impact funds given to BLM from Conoco Phillips on behalf of Nuiqsut for the new development area at GMT1 & 2 needs to be separated.

The RMS needs to remain “Regional” for all 8 villages. The Regional Mitigation Strategy for the entire Arctic Slope Region can still be created with the understanding that it is for all 8 villages to benefit from.

The impact funds for Nuiqsut (since the funds are for only Nuiqsut residents) should be called the Nuiqsut Mitigation Fund so that they are separated and all parties understand the difference. The Nuiqsut Mitigation Strategy can be one of 8 Strategies that are unique to each village and it’s subsistence areas.

The impact funds for Nuiqsut for this process needs to be localized for their community. There needs to be Nuiqsut residents that are in control of this process and determine how the funds are to be used.

The map area needs to be more localized to the areas that the Nuiqsut residents hunt, not all the way north to the Admiralty Bay at Cape Simpson. Please rely on their local residents to lessen the area first identified by BLM. See Map labelled Map #1.

The allowable activities could include monetary benefits to local residents upon proof of impact. Proof of impact can be a notarized document and witnessed by an elder, that states and shows specific hunters that are affected by activity in the area that the local resident does their subsistence activity, since minimization of impact cannot be achieved. Monetary benefit needs to be somewhat equal to the dollar amount of either scenario

- a) Monetary amount spent by hunter to do activity or,
- b) Value of loss of caribou

Because we have studies that show the caribou herds travel across the entire north slope, it’s most likely that this impact to the GMT1 & 2 area will have an impact to hunters in other villages as well. This activity in GMT1 & 2 cannot be isolated to the residents of Nuiqsut only. See Map labelled Map #2 The NSB Planning Department have produced a map of the North Slope showing the heart of NPR-A. This map includes 267 recorded camps and cabins utilized by residents from Barrow, Atkasuk, Wainwright and Nuiqsut. This is the same area that the caribou migrate to and from. These resident hunters will also be affected by the impact of development at GMT1&2. See Map labelled Map #3.

Additional comment from Ms. Akpik-Lemen in email transmittal:

I was told that the number of caribou per hunter is too low but this gives a starting point to those impacted by the project.

(The following table was provided to BLM in spreadsheet format.)

		Cost			Subtotal
# of caribou needed, per hunter, 20 hunters	8				
Weekend trips	5	\$1,200.00			\$6,000.00
Purchase from Palmer					
female		\$3,500.00			

		Cost			Subtotal
male	8	\$1,500.00			\$12,000.00
Option A					
# of Local hunters reimbursed by # of weekend trips		20			\$120,000.00
This assumes that there are 20 hunters that tried to catch caribou for 5 trips annual					
Option B					
Local hunters forecasted # of caribou from Palmer					\$
This assumes that there are 20 hunters needing 8 caribou purchased from the farm					240,000.00
Option C					
Mr. Prime Beef cost at 185 lbs, plus freight,for 8 caribou		\$1,050.00			\$168,000.00
Option D					
AC Store in Barrow Reindeer Costs	225	12.49			
At 12.49/lb for 225 lbs for 8 caribou for 20 hunters		2810.25	8	20	\$449,640.00
Option E					
AC Store in Barrow, Meat Package	7	319	8	20	\$357,280.00
Prepackaged meat packages @31 lbs each					

There are a few options to replace the caribou from our subsistence diet. They are as follows:

Option A

Hunters typically spend \$1200 per weekend trip, could take up to 5 trips. For 20 hunters that amount comes to \$120,000

Option B

If hunters are not able to hunt caribou, reindeer could be a replacement. The Reindeer Farm in Palmer sells a male for \$1,500. At least 8 caribou needed annually. For 20 hunters that amount comes to \$240,000

Option C

If hunters are not able to hunt caribou, a comparable meat package from Mr. Prime Beef in Anchorage comes to \$1,050 for 8 caribou. For 20 hunters that amount comes to \$ 168,000.00

Option D

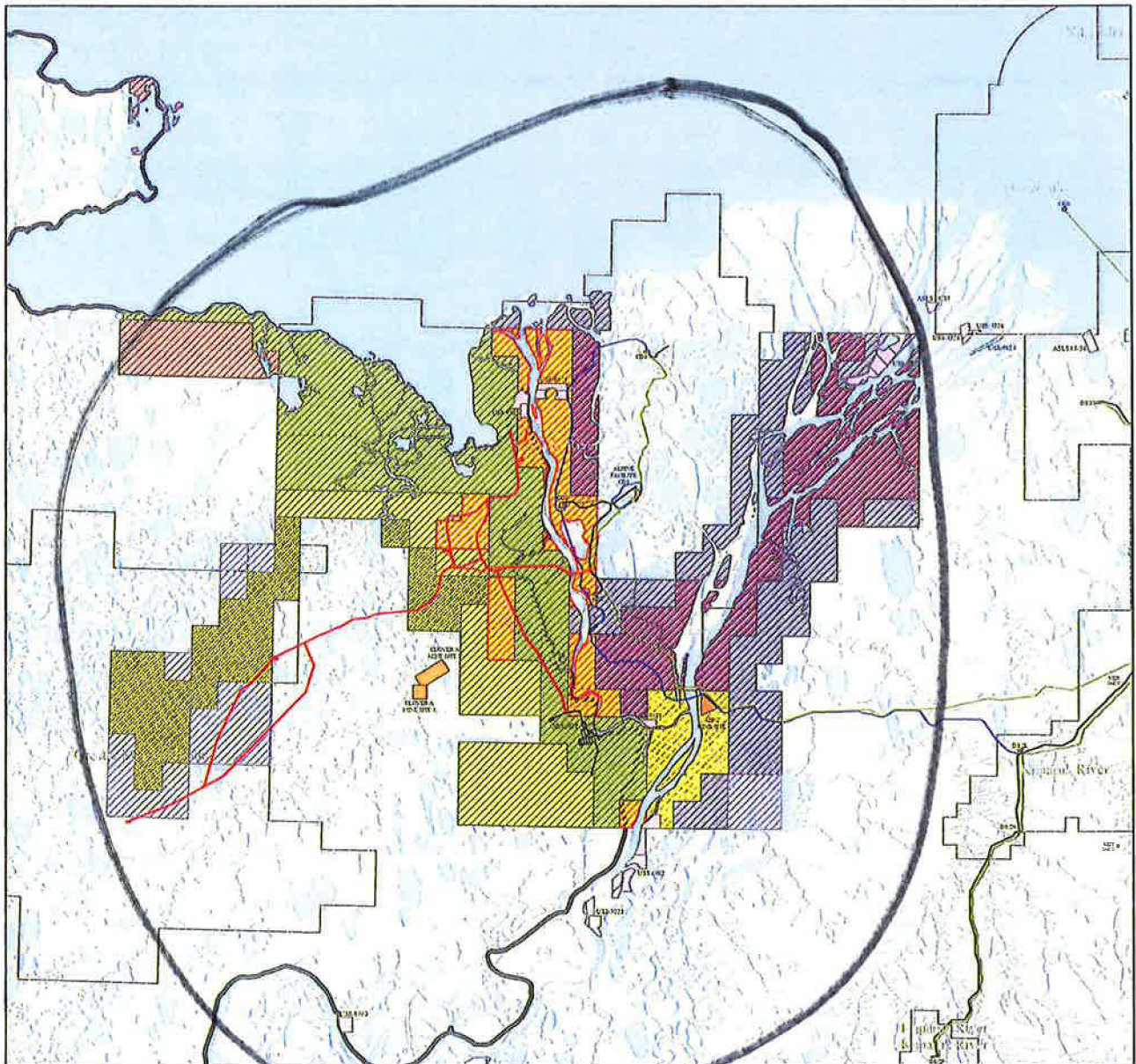
AC Store in Barrow sells Reindeer Meat for \$12.49 per pound. Average caribou weighs 225 pounds for 8 caribou per 20 hunters comes to \$449,640

Option E

AC Store in Barrow sells beef meat packages. A person would need 7 packages per caribou, times 8 caribou at 20 hunters comes to \$357,280

Map # 1

KUUKPIK CORPORATION LAND SELECTION



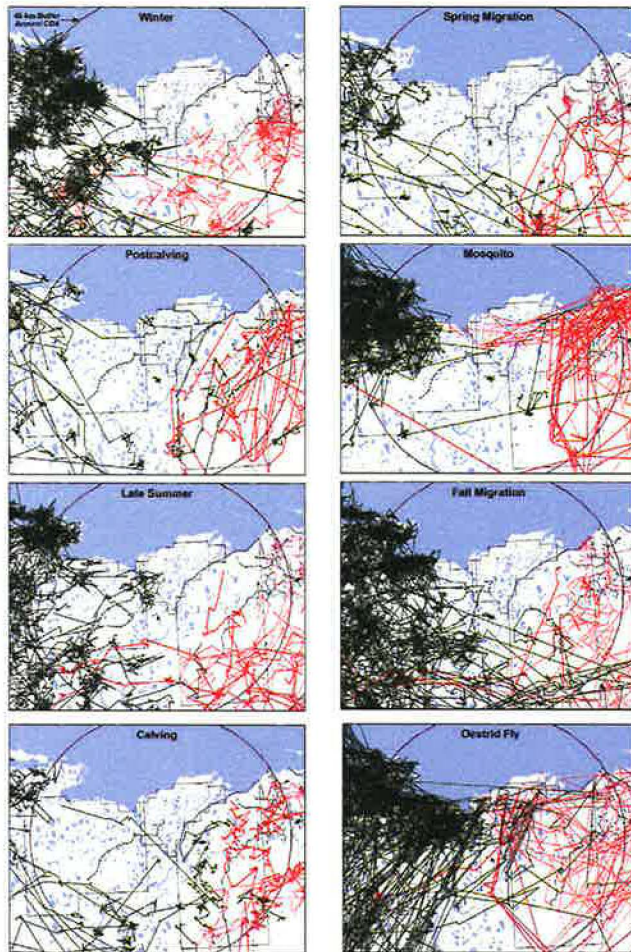
Legend

- | | |
|-----------------------|-------------------------|
| Proposed Pipeline | Interim Conveyance 2318 |
| Proposed Gravel Roads | Interim Conveyance 1838 |
| Proposed Drill Sites | Interim Conveyance 1568 |
| Existing Gravel Roads | Interim Conveyance 628 |
| Re-Supply Ice Roads | Interim Conveyance 620 |
| Pipelines | Interim Conveyance 568 |
| Drill Sites | Interim Conveyance 113 |
| Native Allotments | Interim Conveyance 109 |
| Operating Units | Selected Kuukpik Land |
| NPRA Boundary | |



Map #2

Movements of satellite-collared caribou from the Teshekpuk Herd (1990-2012 and Central Arctic Herd (1986-1990 and 2001-2009) in the ASDP study area during 8 different seasons.



Movements of GPS-collared caribou from the Teshekpuk Herd (2004-2012) and Central Arctic Herd (2003-2006, 2008-2012) in the ASDP study area during 8 different seasons.

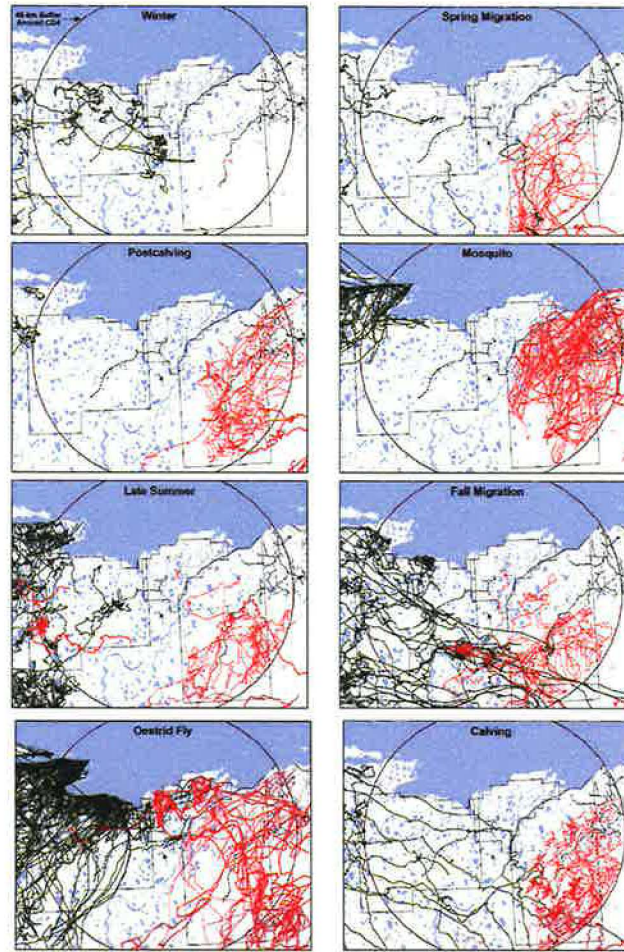


Figure 3.3-11

Ranges of the Teshekpuk and Central Arctic Caribou Herds, Satellite and GPS

Legend

- Central Arctic Herd
- Teshekpuk Herd
- Existing Infrastructure
- Proposed ASDP Road
- Aerial Survey Area

DRAFT SEIS

Draft Date 1/23/2014

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data, or for purposes not intended by BLM. Spatial information may not meet National Map Accuracy Standards. This information may be updated without notification. For official land status information refer to Cadastral Survey plats, Master Title Plats and land status case-files.

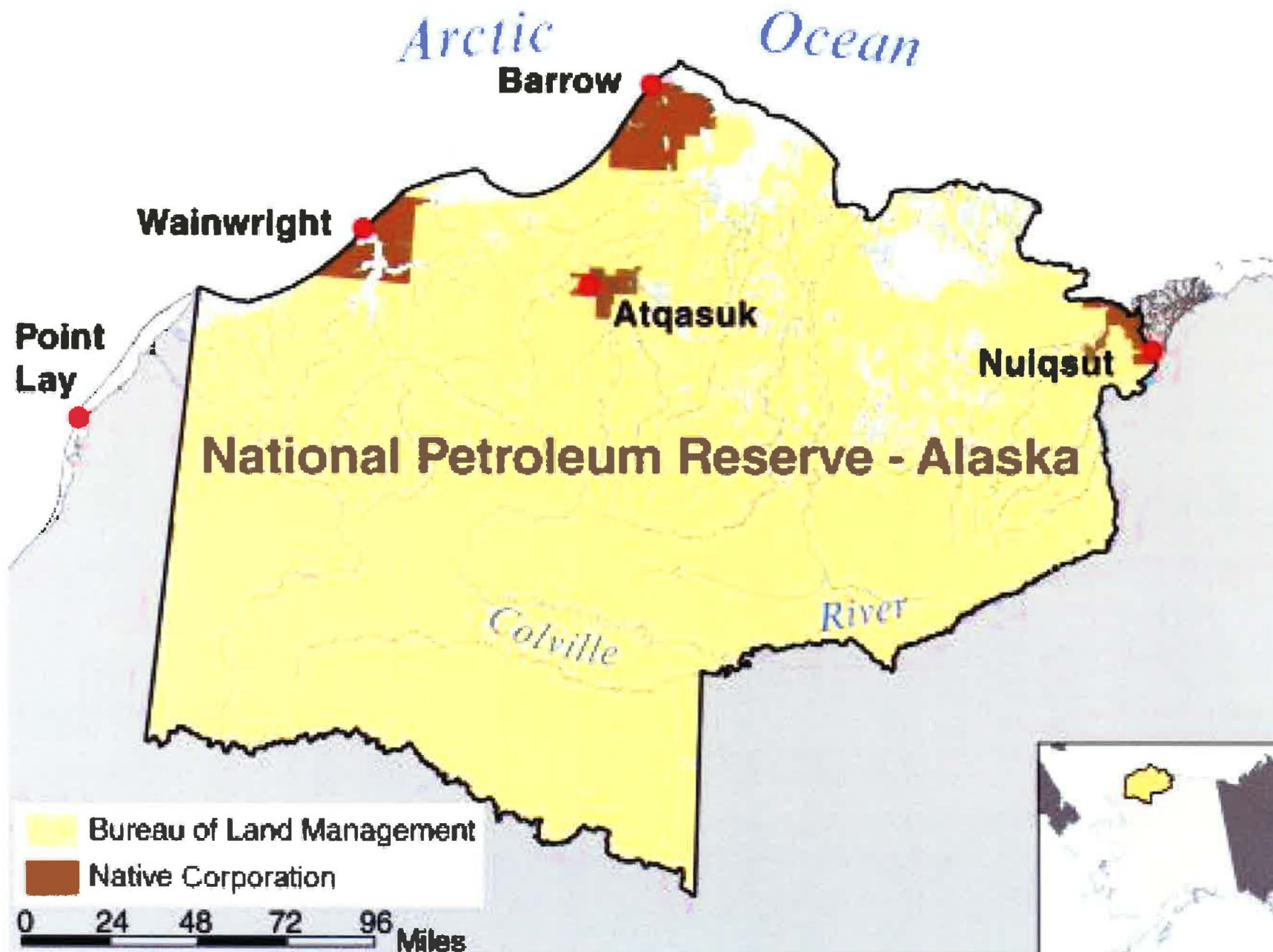
NAD 1983 StatePlane Alaska 4 FIPS 5004 Feet



Bureau of Land Management - Alaska
National Petroleum Reserve - Alaska

GMT1 Development Project Supplemental
Environmental Impact Statement 2014

Map #3



COMMENT LETTERS FROM MR. JOSEPH AKPIK
NOVEMBER 23, 2015

... We will have to carefully plan, with Northwest Corner of NPRA. We are reaching subsistence area of Barrow and Land-Use Plan to be in place.

NVN Council will consider the Economic Plan Strategy.

COMMENT LETTER FROM MAYOR DOUG WHITEMAN, CITY OF ATQASUK
NOVEMBER 30, 2015

**Comments from Mr. Doug Whiteman, City of Atkasuk
November 30, 2015**

I've a combination thought and concern that I struggle to be clear on.

At the beginning of the RMS workshop, there was an expression of comment regarding the boundary that was warm, polite and overwhelming enough that the consensus mood was to 'please ignore the boundary'.

During the prioritization groups, when asked to place dots for the top 3 entry choices, most groups wrote/created interrelated entries.

The format of this process employs fixed categorical divisions, almost symbolic, whereas the nature of the region is that of an interwoven, ever changing dynamic that defies most fixed assumptions.

Assumptions of cause and effect, predicting beneficial results of mitigation strategy was repeatedly commented on.

The root of my concern is about arbitrary lines and categories being implanted, (as best guess starting points), then built upon and becoming fixed, rigid standards.

The ranking of intertwined dynamics is divisive, presumptive and highly likely to drift from reality in the very near future, leading to further reflexive divisions.

It was a wonderful compliment to have several folks ask how to translate our reality into terms they could employ in Washington DC conversations, as they seemed to realize the regional reality was in variance to the discussion.

With the strong political trend towards climate change carbon fuel attribution, we are all concerned that these mitigation efforts could trend towards symbolic intent to designate larger areas as off limits permanently, creating fixed regulatory impediments based on still developing, incomplete data.

In this, we have the concern of becoming pawns, being saved from ourselves as increased focus on the arctic seems inclined towards impulsive generalization.

The potential impacts of this mitigation process are as much a concern as those of development.

I wish to express sincere appreciation for the warm RMS workshop dialogue that developed. There seemed a lack of stridency throughout the gathering.

Many, if not most hereabouts, have found it is counter productive to speak of subsistence to those who do not live it, as sound bites get extracted, reinterpreted out of text and built upon, then employed as categorical metrics within decisions.

If we do not speak we are spoken for, yet the language of the discussions are self limiting and diametrically opposed to subsistence concepts.

This mitigation strategy needs to stay flexible and responsive or it will not keep pace with the change dynamic of the region.

Sincerely,

Doug/Atq

City of Atqasuk

COMMENT LETTER FROM STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES
NOVEMBER 30, 2015

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES OFFICE OF PROJECT MANAGEMENT & PERMITTING

BILL WALKER, GOVERNOR

550 WEST 7TH AVENUE, SUITE 1430
ANCHORAGE, ALASKA 99501-3650
PHONE: (907) 269-8690
FAX: (907) 269-5673

November 30, 2015

Molly Cobbs, NPR-A RMS Coordinator

Bureau of Land Management
Alaska State Office
222 West Seventh Ave., #13
Anchorage, AK 99513

Re: Regional Mitigation Strategy (RMS) for the National Petroleum Reserve-Alaska: Feedback from RMS Workshops

Dear Ms. Cobbs:

The State of Alaska, Department of Natural Resources (DNR) appreciates the opportunity to participate in the Regional Mitigation Strategy (RMS) workshops held both in Fairbanks and most recently in Barrow. DNR would like to acknowledge the importance of these types of outreach meetings, but we also recognize the value of these meetings is dependent on BLM's ability to accept and implement feedback from the participating stakeholders. That said, we offer our input in hopes that BLM will incorporate our suggestions as they advance their efforts to effectively mitigate impacts from proposed and future NPR-A development.

In regards to stakeholder engagement, BLM is striving to prioritize efforts and outcomes of the RMS to positively impact local communities, Native land owners, and individuals that live within or around the boundaries of NPR-A. The State is encouraged and supports those efforts and encourages BLM to continue to look for ways to assure that any compensatory mitigation BLM has received from NPR-A development be used in a way that is acceptable to the impacted communities. To help reach that goal, the State encourages BLM to utilize the NPR-A working group to help develop the RMS. As many stakeholders discussed at the Barrow workshop it is understood that this type of work (RMS development) would clearly fall under the intent in BLM's creation of the NPR-A working group and creating additional working groups to develop the RMS would only cause confusion and inefficiencies. BLM's commitment to move forward with the development of an RMS is a task that, to date lacks formal guidance and may have difficulty adapting to the unique local needs and characteristics of Alaska unless the local stakeholders are included in the development process. Involvement and oversight from the NPR-A working group will help ensure that concepts within the overall direction of the RMS are supported by local stakeholders early on in the RMS development process.

Furthermore, DNR will continue to encourage BLM to clearly define and follow a transparent process in its efforts to develop the RMS. Absent BLM providing clear policy guidance and RMS development through a formal rulemaking process, it appears BLM is essentially implementing

draft policy without following a formal regulatory or procedural process. This approach limits the amount of effective transparency. Therefore, implementation decisions and associated consequences regarding this RMS plan cannot be fully realized and are currently unknown. While DNR questions the current process for the implementation of the RMS, we do see the need for conducting a transparent development process in order to help ensure this plan is developed in a manner that is in the best interest of the State of Alaska. We appreciate BLM's ability to understand and balance this complicated relationship and we are interested in staying engaged with BLM and affected parties to help promote the best way for BLM to develop the NE NPR-A RMS. To that end, we offer these suggestions:

Remove State land from RMS boundary

Probably the biggest concern expressed by the majority of participating stakeholders during the Barrow RMS workshop was the draft boundary used to encompass the NE NPR-A RMS. As a result of the dialog during the Barrow workshop, we appreciate BLM's current understanding for the need to change the proposed boundary. After the Barrow workshop and based on further discussions with stakeholders, we agree that refining the proposed boundary line is essential and it is imperative that lands administered or owned by the State of Alaska or other non-federal entities should not be included in this boundary for the following reasons:

- Over 2.1 million acres of State land is encompassed in the proposed RMS boundary (approximately 1.5 million acres on land and approximately 670,000 acres of offshore). In BLM's rationale for the proposed boundary (number 4) states "While the majority of the area within the proposed RMS boundary is managed by the BLM...". This statement is misleading based on the amount of State and private land encompassed in the proposed boundary. It's important to point out that our very rough calculations actually show that there are more State lands included in the RMS than BLM managed land. Even if our calculations are slightly off, the RMS has encompassed just as much State land as BLM land.
 - If BLM has acreage calculations for the proposed RMS boundary in relationship to land ownership, the State requests that information.
- The State encourages mitigation opportunities on state lands and will consider any future mitigation proposals and will determine the merit of each proposal on a case by case basis. A boundary line does not change the State's willingness to consider or approve future mitigation stemming from NPR-A development and could have the unintended consequence of limiting future mitigation opportunities.
 - BLM has informed the agencies and the public that no project will be dependent on the approval of mitigation proposals on State land. We request that this language be included in the RMS for State land and other landowners.

- The boundary line, as drawn, doesn't serve a meaningful purpose. It appears that mitigation or impact analysis from this plan won't be restricted to the proposed boundary (i.e. mitigation that falls just outside the boundary may be acceptable). Any boundary developed under this methodology and rationale has added more confusion and uncertainty to the purpose of this plan, rather than provide clarification.

Develop a flexible framework for requiring mitigation in order to reflect dynamic ecological resources

Throughout the planning and review processes on GMT-1, NPR-A IAP, the RMS, Alpine Satellite Development plan, and even further back in historical NPR-A planning efforts, BLM has stressed that the resources in this area are very dynamic including but not limited to changing climate conditions, wildlife migration patterns, community connectivity, subsistence impacts, and much more. For those reasons drawing a static boundary line in this manner seems counterintuitive to the consistent message BLM has used to describe these resources. In other words, a static line does not seem to match the intention of adaptively mitigating for dynamic resources. Considering BLM is only intending to require compensatory mitigation for project impacts on land with which BLM has authority over, BLM should only draw a boundary line around the area(s) which would require mitigation under the NPR-A NE RMS and which BLM has administrative authority over. This is the only appropriate boundary/resource that is somewhat static.

Again, many agree that the resources in NPR-A are rapidly changing; therefore, the same flexible considerations should be made while determining how to mitigate potential impacts to protect those dynamic resources. Decisions surrounding appropriate mitigation will change from year to year or decade to decade, therefore, mitigation should not be restricted by a boundary or an ill-defined policy, but rather by a negotiation between BLM, the applicant, local and impacted communities and the land owner of what type of mitigation might be essential to help offset unavoidable impacts from future development. This proposed approach allows a group of local stakeholders and subject matter experts to determine where, when, and how effective mitigation may occur.

Focus on process and transparency

The State encourages BLM to create a draft framework for the development of a compensatory mitigation plan. This framework should clearly describe a transparent mitigation process for future NPR-A projects in order to follow a framework that effectively analyzes and mitigates impacts if /when those impacts are determined to be "unavoidable." BLM should also make expressly clear which regulatory or administrative process an applicant will be expected to follow and why BLM's own attempts to analyze potential impacts and develop mitigation practices from their own landscape-level, regional, and project specific environmental review is not sufficient. Additional analysis and compensatory mitigation cost requirements that fall well outside, or are in addition to, the NEPA review and/or existing regulatory processes should not come as a surprise to a project applicant or local community developer.

As we have learned in the public meetings, BLM is currently spending \$1,000,000 trying to develop an RMS in Alaska in order to then develop a plan on how to allocate the remaining \$7,000,000 from Conoco Phillips GMT1 mitigation payment intended to fund future mitigation projects. Without the explanation of any framework established or followed (to date), this appears to be an unorganized and inefficient use of funds that might otherwise be applied to actual mitigation project efforts if BLM were following a specific method to calculate and appropriate mitigation fees.

BLM should fully describe how RMS outcomes will interact with, and not duplicate or contradict, existing NPR-A stipulations or land management practices. There are existing protected areas and buffer zones within the NPR-A resulting from the NPR-A IAP EIS review process - without careful consideration, these boundaries will overlap and create new boundaries established by a separate BLM process (e.g., RMS) and may cause more confusion than provide opportunity for effective mitigation. BLM should clearly describe the existing, guidance for resource management and allowable use within the NPR-A, which have already been developed via the NPR-A IAP, several project specific EIS's, and now the RMS. It should be made clear how those existing guidelines and stipulations will be considered when mitigation projects are proposed in the future.

- BLM should also fully describe how the recent Presidential Memorandum on Mitigation may impact BLM's process to develop the RMS. In particular, BLM should describe how BLM's efforts will be fully coordinated with the efforts among the multiple federal agencies listed in the Memorandum, now required to also develop new mitigation policies. Due diligence throughout a formal rulemaking process should be followed by all involved federal agencies to help ensure there will be no unnecessary duplication of the existing mitigation requirements and associated costs required by current statute or regulation, such as wetlands compensatory mitigation required under the Clean Water Act. It is unclear if the additional federal agencies within the Departments that received the Memorandum (DOI, USDA, EPA, and NOAA) will develop their mitigation policies through a formal rulemaking process. The concern remains, and is now underscored given the Memorandum, the multiple federal agencies must avoid developing new draft policies requiring compensatory mitigation without conducting a fully coordinated transparent rulemaking process. Without following a formal clearly defined process, the public may not stay informed and there will be reduced opportunity for public participation. In addition, potential NPR-A developers and/or current leaseholders should be fully aware of emerging regulatory developments or policies that may impact their ability to develop their leases.

The RMS effort should focus on the outcomes and lessons learned from the multiple scientific and environmental reviews conducted by BLM for the NPR-A region, not duplicate the requirements set in place via the NPR-A IAP EIS, Alpine Satellite Development EIS, NPR-A working group, current and future permit stipulations, and other enforceable land management practices. The RMS effort should clearly develop a process that would allow various mitigation options if there are unavoidable impacts from future NPR-A development, instead of pre-determining what actual mitigation and compensation will be required. It would be illogical and unsupported by the typical

scientific analysis if BLM developed a plan that discusses mitigation requirements for unknown impacts, to changing resources and habitat, in a changing environment.

In closing, these comments are intended to offer assistance as BLM continues to advance their efforts to effectively mitigate impacts from proposed and future NPR-A development. DNR recognizes and appreciates the committed level of outreach the BLM Alaska office has offered, to date, in developing the RMS and we hope to stay engaged with our federal counterpart as you continue your efforts. If you have any questions or would like to discuss this feedback further, please do not hesitate to contact me.

Very Respectfully,

A handwritten signature in blue ink, appearing to read 'Sara', followed by a long, horizontal, slightly wavy line that extends to the right.

Sara Longan

COMMENT LETTER FROM ALASKA WILDERNESS LEAGUE, CONSERVATION LANDS FOUNDATION,
NORTHERN ALASKA ENVIRONMENTAL CENTER, SIERRA CLUB, AND THE WILDERNESS SOCIETY
DECEMBER 1, 2015

**Alaska Wilderness League * Conservation Lands Foundation * Northern
Alaska Environmental Center * Sierra Club * The Wilderness Society¹**

Bud C. Cribley, State Director
Bureau of Land Management
Alaska State Office
222 West Seventh Avenue, #13
Anchorage, AK 99513

1 December 2015

Re: National Petroleum Reserve – Alaska Regional Mitigation Strategy Workshop #2 Comments

Dear Mr. Cribley

We appreciate the opportunity to comment on the draft components of the Regional Mitigation Strategy (RMS) for the northeast region of the National Petroleum Reserve – Alaska (Western Arctic). In submitting these and other comments throughout the process, we hope to ensure durable and lasting protections for areas already identified as important for wildlife, conservation, and subsistence resources and values throughout the region, including the Teshekpuk Lake and Colville River Special Areas. Ensuring the long-term protections of these areas will support critical resources and maintain the region's unique values into the future, and is in furtherance of the Bureau of Land Management's (BLM) broad mandate to protect the values of the Western Arctic from the adverse impacts of oil and gas development.

The following contains input on the preliminary goals, ranking criteria, mitigation actions, unavoidable impacts, mapping recommendations exercise, and transparency as a follow-up to BLM's RMS workshop and summary from Barrow, AK, on September 24th and 25th. We provide suggestions that BLM should incorporate into the RMS in order to fulfill its commitment to a balanced management approach for the Western Arctic for development and conservation.

Overarching Management of the Western Arctic

Today, the Western Arctic is the largest intact "wild" area in the nation, but with the permitting of the GMT-1 project the future outlook of this area will change forever. In 1976, Congress transferred management of the Western Arctic from the Navy to the Department of the Interior and directed future Secretaries to ensure "maximum protection" of the Western Arctic's "subsistence, recreational, fish and wildlife, or historical or scenic value."² Based on this authority, the Secretary originally designated three Special Areas — the Teshekpuk Lake, Colville River, and Utukok River Uplands Special Areas—to protect these values. The landmark 2013 Integrated Activity Plan (IAP) reaffirmed the protections for Special Areas by expanding the Teshekpuk Lake and Utukok Uplands Special Areas, expanding the purposes of the Colville River Special Area, and adding the Peard Bay and Kasegaluk Lagoon Special Areas. The IAP also identified important waterways and included protective buffer zones along the banks. Protection of these areas and the values of the Western Arctic is especially important now as oil and gas activities proceed.

¹ Letter prepared with assistance from Trustees for Alaska.

² 42 U.S.C. § 6504.

The very first development project, the Greater Mooses Tooth Unit 1 (GMT-1), has put BLM's management to the test and underscores the need for more durable conservation measures in the Western Arctic. The GMT-1 decision failed to uphold the balance for conservation by allowing permanent oil and gas infrastructure within the Fish Creek setback, an area critical for subsistence resources and activities, when a viable alternative existed. Because this is an area listed within the IAP where there is a best management practice is to preclude permanent infrastructure, the GMT-1 decision raises serious concerns about the durability of other protective measures in the IAP. It is imperative for the BLM to strengthen the management of all currently designated areas through meaningful mitigation in the face of the impacts from GMT-1 while also integrating meaningful and lasting mitigation actions anticipating future permitting decisions.

An immediate concern within the BLM's RMS summary is in the Closing Comment, which infers that mitigation strategies focused on "impacts on fish and wildlife habitat" are not linked to "impacts on communities and subsistence." Because fish and wildlife habitat support the resources foundational to subsistence cultures, mitigation actions for conservation or habitat protections are one set of tools to address multiple impacts on the landscape as well as impacts on communities and subsistence. This understanding should be reflected throughout the RMS process and the final strategy.

Mitigation Goals

The goals and objectives of the RMS are extremely important to ensure the body of the document is steered in the right direction. There were numerous proposed goals discussed at the Barrow workshop, but we support these goals as the highest priorities that BLM should address and achieve through the RMS:

1. Maintain functioning habitat necessary to sustain fish and wildlife species abundance and distribution. (BLM's preliminary goal #1)
2. Maintain areas in the NPR-A with natural, wild characteristics, which contribute to the subsistence, cultural, and ecological values of the region.
 - This goal will ensure BLM is able to achieve its directive for balanced management in its permitting decisions for "subsistence, recreational, fish and wildlife, or historical or scenic value."
3. Ensure continued access and traditional and customary use to areas that hold important ecological or cultural significance.
 - This goal is similar to BLM's preliminary goal #2, but rather than simply referring to "subsistence" the term "traditional and customary use" encompasses more needs or reasons for accessing a region.
4. Protect and enhance quality of health, life, and safety for residents in and around the NPR-A.
 - This goal is similar to the BLM's preliminary goal #4, but it expands the purpose to "health, life, and safety" for community members in the region.
5. Maintain ecosystem functions in the face of increasing climate change impacts and development pressures.
 - In order to ensure that any mitigation actions are effective, adequate monitoring and adaptive management is necessary over time.
 - This goal is essential to ensure mitigation actions achieve their purposes while impacts from climate change and development accumulate over the region.

Mitigation Ranking Criteria

With numerous goals from a RMS, the ranking criteria is extremely important to identify what mitigation actions will be the most effective and to establish necessary tools to offset the impacts of development. In

order to ensure the goals listed above are the main objectives of any proposed mitigation action, we believe the following ranking criteria proposed by BLM are the most important:

- Durability and Additionality: How durable is the outcome?
- Relationship to Impacts: Will the proposed action mitigate more than one impact? If so, which others, and how important are they to the stakeholders?
- Feasibility and Effectiveness: To what degree will the proposed action mitigate the impact(s)?
- Durability and Additionality: Is the proposed action additive?
- We also believe it is important to consider these additional proposed criteria for ranking mitigation actions:
 - Proximity: To what extent does the action yield benefits to a larger region?
 - Feasibility and Effectiveness: How does this mitigation action facilitate future mitigation actions, or build in resilience to prevent the need for future mitigation actions?
 - Durability and Additionality: Does the action address the most vulnerable area or prevent cascading impacts?
 - Durability and Additionality: Will the mitigation action remain meaningful and effective over time, in light of changing conditions?

Mitigation Actions

Central to the Presidential Memorandum “Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment,” Secretarial Order 3330, the Department of the Interior’s Landscape-Scale Mitigation Policy, and the BLM’s own draft Mitigation Policy are strategies to use a landscape- or watershed-level approach to identify and facilitate investment in key conservation priorities, integrate mitigation considerations in project planning and design early on, and ensure durability of mitigation actions.

These mitigation directives also support the need for incorporating monitoring and adaptive management throughout a mitigation strategy. Any actions identified within the RMS should be considered through the lens of climate change and its impacts. Management efforts will need to be reevaluated and adapted to ensure that any mitigation measures remain meaningful and protective over time and as conditions change in the Western Arctic.

Mitigation actions the BLM should prioritize within the RMS to ensure for durable, additional, and long-term solutions for balanced management include:

- Special Area Management Plans: BLM should utilize mitigation funds to complete a formal management plan for the Teshekpuk Lake Special Area and update and strengthen the Colville River Special Area management plan. These plans would be consistent with the IAP and include management prescriptions and goals, clarify what uses are or are not allowed in each area, and include adaptive management measures in order to protect the special resources and values of each area. Management plans for the Teshekpuk Lake and Colville River Special Areas will enhance the stewardship of the landscapes and resources, and ensure these critical areas are adequately protected from the adverse effects of oil and gas development. The IAP re-established the purpose of the Special Area designations to mean a combination of being open or closed to leasing and/or permanent non-subsistence infrastructure. However, stressors are on the rise in Special Areas due to climate change and oil and gas exploration and development activities, including ice road access, work camps, seismic testing, and more. Management Plans would allow BLM to reverse adverse impacts of authorization decisions to ensure decisions are consistent with the purposes of each special area.

- This concept was not captured within the BLM's "Mitigation Actions (by Goal) – Nominations to Date" document or the summary document from the Barrow RMS workshop despite our recommendations.
- The BLM needs to work to manage these areas in a way that achieves "maximum protection" for the surface values and resources of the Reserve. The BLM should use the RMS as an opportunity to put in place protective measures for these critical areas before additional development proceeds in the Western Arctic.
- This action would address numerous preliminary mitigation goals, including BLM's preliminary goals #1, #2, #4, #5, #6, and #7 as well as our five goals listed above.
- This action would strongly meet many of the ranking criteria suggested above. This action would be durable for the life of the plan, would ensure adaptive management, and would address a larger landscape already identified by BLM as critical habitat. These plans would mitigate more than on impact as it will address a suite of issues, including the most vulnerable areas. These plans would be additive as BLM does not plan completing one for Teshekpuk Lake Special Area nor to update the Colville River Special Area Management Plan.
- Conservation Easements and/or Rights-of-Way: Conservation easements and rights-of-way can effectively offset significant, unavoidable impacts from development. These easements should last the life of the impacts of the project and be held by a third-party to ensure their durability. BLM's 2013 IAP took a large-scale approach to planning, and identified important values within Special Areas and river buffers, and these areas should be the first places easements and rights-of-way are used to solidify and ensure meaningful protections. BLM should also look broadly at protecting key subsistence areas and migratory paths with these tools to ensure that ecological functions are preserved on a landscape-level scale and that protections are broad enough to offset the impacts to subsistence users and migratory species such as caribou. Conservation easements and rights-of-way could be used to ensure that key subsistence areas, such as Fish Creek, are protected through the use of more durable instruments. Durable conservation easements or rights-of-way have the potential to protect traditional and cultural-use areas and the fish and wildlife resources they support so communities can access and benefit from those areas for generations to come.
 - This action would address numerous preliminary mitigation goals, including BLM's preliminary goals #1, #2, #4, #5, and #6, as well as our five goals listed above.
 - This action would strongly meet many of the ranking criteria suggested above. This action would be durable for the life of the impacts of the development project and additive to the management of the area. The placement of these easements or rights-of-way can address multiple impacts, such as traditional and customary use access and ensuring ecosystem function, as well as build in resilience for vulnerable areas affected by climate or cumulative development impacts.
- Lease Buybacks: Lands of high conservation and subsistence values have already been leased near the community of Nuiqsut, within the Colville River and Teshekpuk Lake Special Areas, and within caribou migratory corridors. Mitigation funds can be used to buyback these leases to allow some or all ecosystem functions to remain or return, as well as to guarantee public access and customary and traditional use access.
 - This action would address numerous preliminary mitigation goals, including BLM's preliminary goals #1, #2, #4, #5, #6, and #7 as well as our five goals listed above
 - This action would strongly meet ranking criteria suggested above to ensure durability and additionality.

Preliminary RMS Boundary

Our comments include more details on recommended boundary foundational principles on the BLM's preliminary draft boundary were submitted to the BLM on 11/5/15 ("Alaska Wilderness League, et al. Re: NPR-A RMS geographic scope and proposed mitigation actions").

The Presidential Memorandum "Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment," Secretarial Order 3330, the Department of Interior's Public Land Policy "Landscape-Scale Mitigation Policy," and the BLM's own draft "Mitigation Policy" all instruct the BLM to take large-scale approaches, encapsulating landscapes or watersheds on a scale that adequately takes into consideration broad ecological values and patterns. Consideration of these values and ecological processes on a small scale may not adequately capture uses and patterns that occur over broad geographical areas. BLM has the opportunity to do this for the already permitted GMT-1 project and future projects in the region.

A strong component of a sound RMS is that stakeholders have confidence in the process. The BLM's preliminary boundary in the September Workshop 2015 included a footnote that states impacts will only be considered from 2.5 miles from the GMT-1 drill pad, road, and pipeline, and the City of Nuiqsut. This arbitrary distance goes against what numerous stakeholders throughout the process have shared about impacts being felt far and wide, from caribou migration to fish access upstream and more. BLM should look more holistically at impacted resources and values across the landscape before assigning distances that may not effectively capture the goals and objectives of the RMS or lead to meaningful mitigation actions for these far-reaching impacts. Additionally, it is only appropriate to include a much larger area to address subsistence and wildlife values because cumulative impacts such as noise, air pollution, and aviation go well beyond the immediate "footprint" of the development. The lack of transparency around this important issue works against the intent of the stakeholder process and the transparency it necessitates.

Recommended Mapping Locations for Mitigation Actions

This summary from the workshop is problematic and difficult for us to comment on the substance it may offer. In creating tables according to just four of the seven preliminary goals, it appears that BLM already prioritized those four goals rather than allowing stakeholder input to lead to prioritization. Also, the nomenclature is confusing. We interpret "mechanism" as another word for "mitigation action," and "intent" as other proposed "goals;" however, only two of the four tables have "intents." It seems this exercise has outpaced the conclusions in the process so far—in that the goals have not yet been agreed upon and the criteria has not yet been agreed upon, so this table makes assumptions and arbitrary grouping preemptively. We recommend another opportunity to comment on the information captured in this exercise at another time with more clarity in the presentation of the information.

We would also note, the "Ikpikaq Special Area" is a misspelling of the "Ikpikpuk River," which is not a designated Special Area.

Unavoidable/Residual Impacts

The "Residual Impacts Overview" provided by the BLM discusses the impacts that will occur to resources that cannot be minimized or avoided on-site. We feel that a better term for these impacts is "unavoidable impacts" as this more clearly describes the nature of these consequences.

Given the "major" impacts BLM has allowed in the GMT-1 project to affect sociocultural systems, subsistence, and environmental justice, these are important focuses of the RMS. However, as a framework

for the region it is imperative to ensure other unavoidable impacts are adequately assessed and mitigated for as they may be determined as major, moderate, etc. in future cases. The RMS should be written to encapsulate yet-to-be-determined unavoidable impacts for future projects, which include those impacts identified from this process. These may include unavoidable impacts that warrant compensatory mitigation on land use, air and water quality, terrestrial and marine mammals, fish, etc.

Transparency and Process

In putting together these comments, we would like to note the challenge in receiving the summary documents from the Barrow Workshop #2, which took place on September 24th and 25th, on November 9th, when the comment period suggested for November 30th. We recommend that BLM provide the summary in a more timely manner or extend the comment deadline in order to ensure stakeholders can supply additive comments that were not captured or need emphasizing from previous input.

The general timeline BLM provided for the upcoming schedule for the RMS offers many challenges. First, we recommend the BLM host two more workshops, one in early 2016 and another after a Draft RMS is released. A Draft RMS should be released by summer 2016 in order to provide enough time for the workshop, feedback, and incorporating the feedback into the Final RMS for October 2016.

Our organizations have provided extensive feedback previously on principles to design the RMS process around and we would refer BLM back to these recommendations as it is still designing the process as we move forward (“Alaska Wilderness League, et al. “Principles and Recommendations for the NPR-A RMS” 27 July 2015).

We would appreciate the opportunity to discuss these recommendations with you at your earliest convenience. Thank you for your consideration and time.

Sincerely,

Kristen Miller
Conservation Director
Alaska Wilderness League

Lindsey Hajduk
Alaska Program Director
Conservation Lands Foundation

Jessica Girard
Program Director
Northern Alaska Environmental Center

Alli Harvey
Our Wild America Alaska Campaign Representative
Sierra Club

Nicole Whittington-Evans
Alaska Regional Director
The Wilderness Society

Cc: Neil Kornze
Josh Hanson
Matt Preston
Steve Cohn
Serena Sweet
Molly Cobbs
Stacie McIntosh
Stacey Fritz
Tahnee Robertson
Jan Caufield
Mike Dwyer
Bob Sullivan
Jason Taylor

COMMENT LETTER FROM NATIVE VILLAGE OF NUIQSUT
DECEMBER 4, 2015

NVN
Native Village of Nuiqsut
2205 2nd Avenue
P.O. Box 89169, Nuiqsut Alaska 99789
PHONE (907) 480-3010 FAX (907) 480-3009
EMAIL native.village@astacalaska.net

December 4, 2015

Molly Cobbs, Regional Mitigation Strategy Coordinator
Bureau of Land Management
Alaska State Office
222 West Seventh Avenue, #13
Anchorage, Alaska 99513

Dear Ms. Cobbs:

The Native Village of Nuiqsut (NVN) wishes to express their gratitude for the opportunity to comment on the *Summary Report from BLM's September 2015 NPR-A RMS Stakeholder Workshop #2* held in Barrow, Alaska per the email request received from you on November 9, 2015.

Review of Summary Report – BLM NPR-A RMS Stakeholder Workshop #2, Barrow, Alaska, September 2015

In response to your request for a review of sections entitled: 1) RMS Boundary; 2) Data sources for the RMS; and 3) Mitigation goals, actions, and selection criteria, please find our comments below.

1) RMS Boundary

The NVN is a bit unsure of the rationale for an RMS boundary when the spatial context considered, the National Petroleum Reserve – Alaska (NPR-A), has already been defined by federal statute.

Since the purpose of a RMS boundary is for administrative considerations, then the desire for an artificial boundary (NE NPR-A RMS) within an artificial boundary (NPR-A) begs the question: what is the administrative purpose for this specific area; and most importantly, how does that purpose differ from its surrounding ‘neighbor’ regions?

In NVN’s view, it does make some logical sense to define a region with definite boundaries to determine communities eligible for compensatory mitigation based on what might be considered a point-source industrial project; however, the NVN is unclear about BLM’s purpose in developing a strict artificial boundary for the RMS. In fact, Section 3(a) of the Presidential

Memorandum of November 3, 2015 (*Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment*) suggests that “agencies should take advantage of available Federal, State, tribal, local, or non-governmental large-scale plans and analysis.” The NVN does not understand why, from a philosophical perspective, one would then subdivide the NPR-A into smaller sub-regional units, unless the ROD phrase “projects enabled or assisted by GMT1” is very narrowly interpreted; and we fail to see the purpose in that.

The NVN does not feel a specific RMS spatial boundary is warranted. Instead, it makes more sense to develop a portable RMS that applies anywhere within the NPR-A. If not, then the BLM may again be forced to investing another \$1 million dollars of federal money in developing each subsequent RMS for other lease areas/projects within the same large-scale (landscape-level) natural region.

Since we are already quite well aware of potential development in the Brooks Range foothills region, do we expect to employ an entirely different RMS should development there be realized? Development in this region will certainly impact the same people that rely upon North Slope subsistence resources and the underlying interconnected ecosystem that supports them, so why would we anticipate approaching it any differently if we are truly focusing on impacts to the people of the region?

While the GMT1 ROD Supplemental Best Management Practice #1 does state that the RMS is “*intended for development enabled or assisted by the GMT1 project*,” the interpretation of this language by BLM seems to be very narrow. One could easily argue that the first development project within NPR-A makes any subsequent project more likely; therefore, GMT1 may enable any other project; whether literally ‘connected’ to GMT1 (via pipeline or road), or not.

After attending the first two RMS Workshops, it appears to NVN that, given the proposed RMS boundary, the purpose of this RMS is to develop a plan to address only the expected ConocoPhillips-Alaska (CPAI) projects within the Greater Moose’s Tooth and Bear’s Tooth lease-area prospects. If this is in fact the case, why does BLM define ‘stakeholders’ to include those communities and organizations outside of the Nuiqsut area? Since potential stakeholders for this RMS process have been so broadly defined by BLM, then the purpose of this RMS certainly appears to be a mitigation strategy for the entire NPR-A.

In summary, confusion that the proposed boundary has created is already generating more problems and misconceptions that it was likely intended to resolve. For example, there are many residents of Nuiqsut that believe the RMS boundary defines a region in which communities are eligible for compensatory mitigation funds; not only for the GMT1 project, but for any other future development in NPR-A, whether that be the ‘Northeast NPR-A’ or not. It is NVNs belief that one of the primary purposes of the RMS is not only to guide future mitigation planning and decisions within the NPR-A, but to communicate the philosophy BLM will employ in mitigation planning and decision-making to the human inhabitants of that region as well.

2) Data Sources for the RMS

The following additional information sources for development of the RMS were included in the BLM NPR-A RMS Stakeholder Workshop #2 Summary Report: a) Nuiqsut Paisanich document; b) Maps of hunting areas of all North Slope communities; c) most recent, detailed and comprehensive subsistence use information (updated maps for Nuiqsut subsistence use areas, prepared for Native Village of Nuiqsut by Stephen R. Braund & Associates); and d) Subsistence Advisory Panel (SAP) data for caribou migration routes over time - considering the Central Arctic caribou herd in addition to Teshekpuk caribou herd.

The NVN feels these additional information sources are valuable, but are not sure the terms *information* and *data* are synonymous. If we assume they are, then NVN highly recommends the integration of Traditional Knowledge (TK) since TK typically takes into account the interactions of all physical and human systems and sub-systems (landscape-level scale) into account.

NVN does understand the difficulty in applying the non-quantitative approaches of TK into Western scientific thought, but feels the limitations of a short period of record for Western quantitative data does present a problem when working to understand landscape-level spatiotemporal processes.

If we assume that ‘data’ is a term used primarily in reference to the *North Slope Rapid Ecoregional Assessment* (REA) since it is presented under the section of the Summary Report entitled Data Sources for the RMS (page 8), then given no new research or data are collected in any REAs, the NVN suggests integrating the information derived from the REA process with TK.

The NVN would also suggest that BLM RMS planners incorporate results from the most recent North Slope Borough Health Impact Assessment (HIA) Report that addresses large-scale development projects and their potential for serious consequences on local communities.

3) Mitigation Goals, Actions, and Selection Criteria

As stated in the BLM NPR-A RMS Stakeholder Workshop #2 Summary Report, a first step in development of the RMS is to identify unavoidable impacts from oil and gas development that cannot be fully mitigated by established avoidance and minimization measures. Once unavoidable impacts are determined and minimization considered, a compensatory mitigation solution is applied (Interior Secretarial Order 3330 & Presidential Memorandum November 3, 2015).

The NVN agrees that BLM has made the step-by-step process of determining whether mitigation would be required quite clear (that is, the *mitigation goals*); however, there has been little detail provided regarding potential options to determine actions and selection criteria other than discrete lists created and assessed by RMS technical contractor Bob Sullivan and workshop participants. NVN would prefer to see a more objective physically-based approach (integrating

TK and Western science literature) than integrating a set of somewhat subjective lists of discrete elements in determining approaches to actions and selection criteria.

NVN also recognizes that we remain in the early stages of this process, and that decision-making in this particular plan is likely to take time given the unique goal of mitigating development impacts for environments that support human populations. At the same time, we are a bit concerned, since progress has appeared to be slow to this point – at least from our perspective – that adequate time will exist to determine the best possible solution; especially given all of the stakeholders that BLM has identified.

Responses to Additional Questions Posed in Email of November 9, 2015

In addition to the review of the summary report, a request was made in your email of November 9, 2015 for responses to the following questions: a) Have we adequately captured the workshop discussions and comments? b) What have we missed? and c) Do you have additional ideas or feedback to contribute? Please find our responses to these questions immediately below.

a) Have we adequately captured the workshop discussions and comments?

The NVN feels the workshop discussions, details and comments have been adequately captured in the Summary Report, and appreciate the efforts involved in assembling and disseminating the report. We did have some difficulty in developing our comments in a timely manner given the BLM email request was distributed on November 9, with a receipt deadline set for November 30. This particular 21-day period included the Thanksgiving holidays during which many people had already established travel plans, with the 30th occurring on the Monday immediately following this break; and for NVN immediately followed by the BIA Providers Conference in Anchorage.

While NVN greatly appreciates the comment deadline extended to us, we do not feel we had adequate opportunity to deliberate and craft our comments before submitting them. Given the importance of this RMS process, NVN believes the comment period timing and duration could have been handled in a more effective manner.

b) What have we missed?

The diversity of opinion at the RMS Workshop #2 was quite significant. And while can be inferred by reviewing the content of the Summary Report in general, the NVN does not believe the magnitude of opinion diversity was adequately highlighted. The NVN feels, regardless of the outcome of this process, that unless BLM believes that overall homogeneity of opinion exists, this should have been more conspicuously noted.

c) Do you have additional ideas or feedback to contribute?

There are a number of contributions NVN would like to contribute at this point. These are listed immediately below.

c-i) NVN does not feel the social impacts identified in the GMT1 Final SEIS and ROD were adequately covered in the Workshop.

Perhaps the most conspicuous social impacts are reflected in the clear and conspicuous conflict amongst stakeholders over what constitutes an acceptable balance of development and ecosystem protection (ecosystem protection that will assure adequate quality and quantity of subsistence resources). This is a fairly common point of contention for the competing interests within our region, which has over time evolved into the use of divisive rhetoric, a good deal of political posturing, and community conflict without apparent resolution. This was well illustrated not only at the first two RMS Workshops, but also at the most recent North Slope Borough Assembly Meeting (Tuesday December 1, 2015) where the assembly and public were highly divided over proposed zoning changes to the areas where the Greater Moose's Tooth 1 and 2 will occur.

There is, without question, clear consensus agreement that industrial development benefits North Slope communities, and that no one wishes to return to the days of zero municipal infrastructure; especially given that oil and gas resources have already been developed in the North Slope region for some time now, and without a “seat at the table,” local peoples could easily be left out of the process. Now that we are moving into development on federal lands, the voice of the people will likely have more impact in the decision-making processes regarding permitting and mitigation of these projects. Clearly local and regional ANCSA corporations have already benefited, and some of those benefits have been passed down directly through dividends to shareholders, and indirectly through the subsidization of community fuel and energy resources, and community projects.

At the same time, there is also concern that subsistence resources have already been impacted in a very significant way, that acculturation has accelerated at a non-natural pace, and that human health impacts are now occurring (please see most recent NSB HIA report on the consequences of oil and gas development on local communities). Potential physical and psychological human health impacts include, but are not restricted to, air and water quality issues, a decrease in availability of traditional foods (due to impacts on animal behavior, and physical and economic access limitations) that have resulted in an increase in diabetes, heart disease, mental health issues, and an exceptionally rapid change to our socio-cultural environment (acknowledging that cultures do naturally evolve with time). While not everyone agrees that these impacts have actually occurred, or if they have how serious they have actually become, it is clear that with increased industrialization and the cumulative impacts that result, these issues and concerns will increase rather than decrease over time.

As stated above, diversity of opinion regarding impacts has generated a great deal of emotion, and as a result it is the opinion of the NVN that one of the most significant social impacts experienced across the North Slope has been unresolved conflict. NVN feels very strongly that even if health of subsistence resources and impacts on access (physical and economic) to them, the health of the people, and potential acculturation are proven to be minimal over time (which NVN very seriously doubts), the negative repercussions of conflict as a component of this process presents a very significant social impact; and one that could potentially have very long-

lasting effects. Therefore, NVN strongly suggests that focus be placed on intra-community conflict resolution as a crucial impact to be mitigated since it is likely to escalate in response to increasing development within NPR-A.

c-ii) The NVN feels, given the variance provided to allow development within the mandated Fish Creek setback in BLM's 2013 BLM Integrated Activity Plan (IAP), that no existing instrument exists to protect remaining traditional tribal subsistence hunting grounds.

It is clear at this point that federal protection of traditional hunting grounds through the 2013 IAP is not sufficient. It is crucial, from both access and mental health perspectives, that the tribe be able to consistently rely on the existence of at least some traditional subsistence hunting areas and the health of the plants and animals harvested from them which constitute our traditional food base. It is the strong opinion of the NVN Tribal Council that without a protection mechanism in place, these subsistence impacts will fail to be mitigated.

The inability to protect the Fish Creek area has resulted in a discussion of how to reliably protect at least some of the remaining traditional and still somewhat pristine hunting areas. NVN has not yet determined how those protections should be provided, but we do feel a component of the \$7 million GMT1 Compensatory Mitigation fund could be used to construct the Colville River Access Road that would allow much improved access upriver to remaining traditional subsistence hunting areas. **This would represent NVN's favored mitigation measure for the GMT1 development**, and illustrates a viable example of how the loss of access to one traditional hunting area may be mitigated by improved access to others (paralleling *the no net loss* concept mandated in the November 3, 2015 Presidential Memorandum).

At this point, it appears the remaining funds necessary to construct this road, which would clearly mitigate some of the impact of losing valuable hunting grounds due to the development of GMT1, ranges from approximately \$3 million to \$6 million. However, even if the road could be completed utilizing \$3 million of \$7 million GMT1 Compensatory Mitigation fund pool, this investment **must be supported by a durable protection of some of the hunting areas accessed via the Colville River Access Road.** If this road is constructed and the associated hunting areas are not protected in durable fashion, and they are lost in the future, then such a significant investment would represent a complete waste of the financial resources to mitigate the loss of the Fish Creek and other traditional hunting areas in and near the GMT1 development project.

c-iii) The NVN Tribal Council would like to take this opportunity to comment on the *Criteria Proposed for Workshop Participants to Consider* tabular array found on pages 13 and 14 of the BLM NPR-A RMS Stakeholder Workshop #2 Summary Report.

- How do stakeholders rate the importance of the impact the proposed action seeks to mitigate?

The NVN feels the best approach in mitigating the impacts of oil and gas development within the NPR-A is to address the specific impacts identified directly, particularly with respect to the effects they have on the human inhabitants of the region.

- Will the proposed action mitigate more than one impact? If so, which others, and how important are they to the stakeholders?

The NVN does not believe that mitigation efficiency can be defined by the number of impacts addressed. Instead, it is felt that the quality of the mitigation action is far more crucial than the quantity of impacts addressed.

- To what degree is there a concern between the proposed mitigation action and unavoidable impacts of oil and gas development in the NE NPR-A?

The NVN feels the answer to this question is very much dependent on how the term ‘unavoidable’ is defined. For truly unavoidable impacts; that is, those identified as being physically impractical, as opposed to being considered ‘unavoidable’ so as not to dampen economic profit, the NVN accepts that some impacts are unavoidable.

- Is the proposed action feasible?

The NVN feels again the answer to this question is dependent on how the term ‘feasible’ is defined. For truly unfeasible actions; that is, those identified in terms of being physically unfeasible, as opposed to being considered ‘unfeasible’ so as not to dampen economic profit, the NVN accepts that some mitigations may be infeasible.

- What is the relative risk that the mitigation action might fail? Is the risk acceptable?

The NVN feels enough information is available to minimize any significant risk that a specific mitigation action might fail. Although it is of considerable interest to minimize risk for mitigation actions that involve financial investment, there may be other non-financially supported mitigations where higher levels of risk might be warranted; especially for those that reflect innovative solutions.

- How durable is the outcome?

The NVN feels that durability is especially important when it comes to mitigating the loss of subsistence resources due to the very significant mental and physical health impacts that result (Diener & Seligman 2004; Foliaki & Pearce 2003; Godoy et al. 2005; Kirmayer et al. 2000; Samson & Pretty 2006).

- Is the proposed action additive?

The NVN sees any proposed action as additive in that nothing of substance has yet been determined. The NVN understands that the role of BLM is “to sustain the health, diversity, and productivity of America’s public lands for the use and enjoyment of present and future generations.” The NVN further understands that there are competing

perspectives on how to simultaneously sustain the health of public lands and increase productivity (if we are referring to economic as opposed to biological productivity). At this point in time the permitting process has been completed and development of GMT1 has been approved by CPAI, so clearly the public sectors impacted by this project will be more economically productive. The ‘additive’ component will now be to provide reasonable mitigation since BLM has determined that avoidance in this case was impossible, and that minimization has been attempted but cannot fully offset the expected impacts. Since mitigation measures are now in the planning stages, not only for GMT1 but for what looks like additional areas within the ‘Northeast’ NPR-A, any action taken would naturally be considered additive.

In reference to the parenthetical statement in table on page 13 under item 8 (*i.e. something that would otherwise not get done by the BLM or some other entity*), the NVN does not expect BLM to take any action for which they are not responsible. However, according to Secretarial Order 3330 and the President’s Memorandum of November 3, 2015, mitigation action is necessary when avoidance and minimization do not resolve all impacts; so therefore, NVN does expect BLM to provide mitigation actions, and mitigation that strongly considers local input – especially from the Tribe since the public (BLM managed) lands in question also fall within NVN jurisdiction.

- Is the proposed location for the mitigation action sufficiently close to the area affected by the development?

The NVN is unclear at this point about how the term ‘location’ will be defined, and feels the controversy over the proposed RMS boundary suggests more than a few other stakeholders are likely unclear as well. Also, the phrase “for the mitigation action” elicits a bit of confusion as well, as the word “the” implies a singular action, so NVN is unsure if this would be used in reference to any specific mitigation (such as with GMT1), or if it will be common language in the RMS; or both.

- Are there unique characteristics associated with the proposed action that are not addressed by other criteria?

The NVN does not believe that ‘uniqueness’ should be a component worth considering on its own merit, although we certainly have nothing against unique and creative solutions. We believe that the best solutions will be relatively simple and straightforward, and will likely easily present themselves to us.

The Native Village of Nuiqsut (NVN) wishes to thank the BLM for the opportunity to comment on the Summary Report from BLM's September 2015 NPR-A RMS Stakeholder Workshop #2, and to provide additional input during the RMS development process.

Respectfully,

NVN Tribal Council

REFERENCES

Diener, E., and Seligman, M. 2004. Beyond Money: Toward an Economy of Well-Being. *Psychological Science in the Public Interest* 5(1), 1-31.

Foliaki, S. and Pearce, N. 2003. Changing Pattern of Ill Health for Indigenous People: Control of Lifestyle is Beyond Individuals and Depends on Social and Political Factors. *British Medical Journal* 327(7412), 406-407.

Godoy, R., Reyes-Garcia, V., Byron, E., Leonard, W.R. and Vadez, V. 2005. The Effect of Market Economies on the Well-Being of Indigenous Peoples and on their Use of Renewable Natural Resources. *Annual Review of Anthropology* 34, 121-138.

Kirmayer, L., Brass, G. and Tait, C. 2000. The Mental Health of Aboriginal Peoples: Transformations of Identity and Community. *Canadian Journal of Psychiatry* 45, 607-616.

Samson, C. and Pretty, J. 2006. Environmental and Health Benefits of Hunting Lifestyles and Diets for the Innu of Labrador. *Food Policy* 31, 528-553.

COMMENT LETTER FROM NORTHERN ALASKA ENVIRONMENTAL CENTER AND THE WILDERNESS
SOCIETY
DECEMBER 9, 2015

**The Wilderness Society
Northern Alaska Environmental Center¹**

Bud C. Cribley, State Director
Bureau of Land Management
Alaska State Office
222 West Seventh Avenue, #13
Anchorage, Alaska 99513

9 December 2015

Re: Achieving the mitigation hierarchy in the National Petroleum Reserve – Alaska

Dear Mr. Cribley,

Thank you for your continued work on developing an effective Regional Mitigation Strategy (RMS or Strategy) for the National Petroleum Reserve – Alaska (NPR-A or Reserve). As we have discussed with you before, the RMS is an important and necessary document for the sound stewardship of the NPR-A. The RMS has the potential to provide greater certainty and predictability for the oil industry, as well as for conservation and subsistence interests. To date we have sent you considerable amount of material on how to achieve a true landscape-level approach for the RMS, and how you can use existing authorities to offset the unavoidable impacts of land use changes. As the Strategy's development moves forward, we encourage you to utilize the content provided within these documents.

Currently, the management of conservation and subsistence values in the NPR-A is not assured or adequate. Durable and necessary conservation actions have yet to balance against the effects of oil exploration and long-term impacts of development activities. Today, almost 1.8 million acres of the NPR-A have been leased to private corporations. These leases commit lands to companies for ten or more years for exploration and development activities, and when pursued, these activities can continue on for many decades. Ice and snow roads are also being permitted and constructed through designated Special Areas, including through the overwintering grounds of the vulnerable Teshekpuk Caribou Herd. With these roads, winter staging activities are occurring on the edges of Smith Bay, an important area for the threatened polar bear, vital fish rearing habitat, and the largest of only a few snow goose nesting colonies in western North America.²

¹ Letter prepared with assistance from Trustees for Alaska.

² See: <http://www.north-slope.org/departments/wildlife-management/studies-and-research-projects/migratory-birds/geese> (Dec. 2, 2015).

Finally, oil production with significant infrastructure has been approved; and areas intended to be conserved and “off-limits” have already been compromised when viable alternatives existed. The effects of development are compounding and their cumulative impacts have not yet been offset with any form of durable protections for conservation and subsistence values. The RMS should fulfill this obligation.

In this letter we offer an initial proposal for how the BLM should utilize administrative directives, including the recent Presidential Memorandum, and the whole “mitigation hierarchy” to effectively complete the NPR-A’s RMS. Utilizing the principles and goals of the entire hierarchy will provide necessary balance and certainty for conservation, subsistence, and industry interests. We begin our comments with some background on the NPR-A and an introduction to the Department of the Interior and BLM’s policy directives for mitigation. Then, in the latter portions of the document we discuss the various tiers of the hierarchy, their importance to the NPR-A, and how they should be realized at a landscape-level through the RMS process.

I. NPR-A Background

A. BLM’s Mandate in the Naval Petroleum Reserves Production Act

In the Naval Petroleum Reserves Production Act of 1976 (NPRPA),³ Congress expressly recognized that the unique cultural, natural, fish and wildlife, scenic and historical values of the Reserve should be protected, and transferred jurisdiction of the nearly 23 million acre Reserve from the Secretary of the Navy to the Secretary of the Interior.⁴ Congress also required the Secretary of the Interior to give special protection to a number of so-called “Special Areas,” specifically mentioning Teshekpuk Lake and the Utukok River Uplands,⁵ and to initiate studies of the Reserve to determine what additional protections should be recommended to Congress.

The Secretary is *fully* authorized in the NPRPA and implementing federal regulations to set aside areas that contain “significant subsistence, recreational, fish and wildlife, or historical or scenic value.”⁶ The regulations published in 1977 pertaining to the NPRPA further clarified “Management and Protection” direction for the Reserve, directing that “Maximum protection measures shall be taken on all actions within the Utukok River Uplands, Colville River and Teshekpuk Lake Special Areas, and any other special areas identified by the Secretary as having significant subsistence, recreational, fish and

³ 42 U.S.C. 6501 *et seq.*

⁴ 42 U.S.C. §§ 6502-03.

⁵ Naval Petroleum Reserves Production Act of 1976, Pub. L. 94-258 § 104(b) Apr. 5, 1976. (“Any exploration with the Utukok River, the Teshekpuk Lake areas, and other areas designated by the Secretary of the Interior containing any significant subsistence, recreational, fish and wildlife, or historical or scenic value, shall be conducted in a manner which will assure the maximum protection of such surface values to the extent consistent with the requirements of the Act for the exploration of the reserve.”) Public Law 96-514 also held that exploration or production follow Sec. 104(b).

⁶ 42 U.S.C. § 6504.

wildlife or historical or scenic value.”⁷ With passage of the NPRPA, Congress clearly provided the Secretary with the authority to protect high value areas within the Reserve and gave the Secretary the discretion to determine how best to use the lands within the Reserve.

B. NPR-A Integrated Activity Plan

BLM finalized the first-ever management plan for the entire 23 million acre NPR-A in 2013. BLM’s IAP is a balanced plan that closes 11 million acres to oil and gas leasing while still allowing industry access to 72 percent of the reserve’s economically recoverable oil. A portion of the 11 million acres that are unavailable to leasing, all of which are in Special Areas, also are restricted from non-subsistence-use permanent infrastructure. The IAP defined Best Management Practices as well, which were developed to minimize impacts from oil and gas exploration and development on the 11.8 million acres of NPR-A lands in the IAP that are open to these activities. The IAP will likely remain in effect for approximately 15 to 20 years.

The final IAP designated a total of five Special Areas, including the new Peard Bay Special Area. The IAP also significantly increased the size of the Teshekpuk Lake and Utukok River Uplands Special Areas. The total acreage of Special Areas in the NPR-A increased from 8.3 million acres under former plans to 13.35 million acres in the 2013 IAP. These Special Areas contain important wildlife habitat for caribou, migratory birds, polar bears, wolves, and birds.

The IAP took an enormous step toward protecting important habitat and prioritizing areas vital to wildlife, subsistence livelihoods, and to our nation’s conservation heritage, while also allowing access to oil and gas reserves. However, as we have already seen with the Greater Mooses Tooth One final decision, Best Management Practices, setback areas, and other restrictions in the IAP can be compromised when the agency is permitting for oil and gas activities. Thus the conservation measures afforded in the IAP are not durable and likely will not be in effect for the life of the developments or their impacts now permitted within the NPR-A. The RMS, however, can provide opportunities for durable conservation and should fulfill this obligation.

Recommendations:

- BLM should follow the mandate of the NPRPA to ensure the maximum protection of the NPR-A’s surface values within the final Regional Mitigation Strategy.
- The Regional Mitigation Strategy should build on the 2013 Integrated Activity Plan to ensure durable protections for the region’s highest conservation and subsistence values.

⁷ 43 C.F.R. § 2361.1(c).

II. Introduction to Mitigation

In addition to mitigation requirements under the Federal Land Policy and Management Act and the National Environmental Policy Act, numerous other policies and guidance documents direct the BLM to require mitigation and specify how mitigation must be employed. These documents provide extremely helpful sideboards for what must be included within an RMS. They include the Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment (2015);⁸ Secretarial Order 3330, Improving Mitigation Policies and Practices of the Department of the Interior (2013);⁹ the follow-up report entitled *A Strategy for Improving the Mitigation Policies and Practices of The Department of the Interior* (2014);¹⁰ the Department of the Interior's Landscape-Scale Mitigation Manual (2015);¹¹ and BLM's Draft Regional Mitigation Manual (2013).¹²

While we will be describing key elements of these policies within the NPR-A context in the latter portions of this letter, below are important features that were emphasized most recently in the 2015 Presidential Memorandum on Mitigation and the 2015 Department of the Interior Mitigation Manual.

- Landscape-scale approach: land use planning for conservation and energy development as well as analysis of proposed development and consideration of mitigation must use a landscape-scale approach to focus development in low-conflict areas and prioritize conservation in areas with important and sensitive resources and values.
- Mitigation hierarchy: the mitigation hierarchy of avoid, minimize, and offset through compensatory mitigation must be employed sequentially, with an emphasis on avoidance as the most important and effective step in the hierarchy.
- "Irreplaceable natural resources": avoidance is the most appropriate tool for addressing "irreplaceable natural resources," "resources recognized through existing legal authorities as requiring particular protection from impacts and that because of their high value or function and unique character, cannot be restored or replaced."
- No net loss of important resources and values: mitigation must achieve a goal of no net loss of important resources and values, with a net benefit goal as required or appropriate.

⁸Available at: <https://www.whitehouse.gov/the-press-office/2015/11/03/mitigating-impacts-natural-resources-development-and-encouraging-related>

⁹Available at: <https://www.doi.gov/sites/doi.gov/files/migrated/news/upload/Secretarial-Order-Mitigation.pdf>

¹⁰Available at: https://www.doi.gov/sites/doi.gov/files/migrated/news/upload/Mitigation-Report-to-the-Secretary_FINAL_04_08_14.pdf

¹¹Available at: [https://www.doi.gov/sites/doi.gov/files/uploads/TRS and Chapter FINAL.pdf](https://www.doi.gov/sites/doi.gov/files/uploads/TRS_and_Chapter_FINAL.pdf)

¹²Available at: http://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/im_attachments/2013.Par.57631.File.dat/IM2013-142_att1.pdf

- Climate change impacts and resilience: agencies must identify and promote mitigation measures that help address climate change impacts and resilience.
- Compensatory mitigation standards: compensatory mitigation (generally comprising of acquisition, restoration or preservation of resources and values) must be:
 - Durable: protected against non-conforming uses like development and lasting as long as the impacts;
 - Additional: demonstrably new conservation benefits that would not occur without mitigation;
 - Be developed based on the best available science: including for determining equivalency of impacts and mitigation benefits;
 - Provide for public transparency: including tracking locations of impacts and mitigation actions; and
 - Include monitoring and adaptive management.
- Promotion of investment by non-profit and private sectors in advance of conservation: agencies must promote the creation of mitigation banks and other structures that provide conservation benefits from compensatory mitigation before development occurs and increase permitting efficiency by allowing developers to purchase credits to offset their impacts.

Recommendation:

- BLM must ensure that the NPR-A's RMS is consistent with Department of the Interior mitigation policies and guidance, including those described and referenced above.

III. Mitigation Hierarchy

Since 2013, and as mentioned above, the Department of the Interior has been actively advancing mitigation policies across the nation's land management agencies. A focus of these efforts has been the Department of the Interior and the BLM's use of the "mitigation hierarchy". This framework offers a constructive way to manage multiple values across large, intact landscapes and to ensure that special natural areas and landscape-level processes are protected. Such goals are particularly relevant to the NPR-A, the nation's largest single administrative land unit and an almost entirely undisturbed ecosystem.

In the following, section we address the three tenants of the mitigation hierarchy: avoidance, minimization, and compensatory mitigation. Generally, we address these features at a landscape-level. Within each of these tiers we discuss their importance to the NPR-A's Regional Mitigation Strategy and how these goals and objectives can be effectively achieved.

1. Avoidance

Durable avoidance is the foundation of successful mitigation. Avoidance is the first and most important tier of the mitigation hierarchy. Without avoidance, the many goals of mitigation will not be accomplished. While avoidance can be achieved at the landscape and the project level, for the purposes of these comments, we will be primarily focusing on avoidance at the landscape-level.

A. Importance of avoidance for regional mitigation success

As described within the Department of the Interior's policies, mitigation has many goals and objectives. These goals include: providing certainty and predictability to industry, moving past project-by-project management to improve the permitting process, providing certainty for important conservation areas and interests, and reducing conflict between stakeholders. At the core of achieving all of these goals is avoidance.

Avoidance is the crucial first step of the mitigation hierarchy because it provides the initial and necessary certainty that all stakeholders need. Certainty for industry is largely premised on where development can occur. Here, industry can make more informed business decisions by knowing where they can and cannot develop (including access to) resources. In the NPR-A, industry certainty largely comes in the form of leases which can guarantee certain activities for a definite period of time. Likewise, certainty for conservation interests largely stems from adequate and durable protection of core natural areas. Identifying and protecting high value environmental areas is necessary for conservation organizations and subsistence users to be comfortable and confident with how public lands are stewarded. Unlike oil and gas leases, there is currently no equivalent form of certainty provided to conservation and subsistence values in the NPR-A. Without any true avoidance, there is a greater likelihood for conflict.

The Record of Decision (ROD) for the Greater Mooses Tooth One (GMT-1) project, the first permitted commercial oil production in the NPR-A, also includes constructive language pertaining to avoidance within the RMS. The ROD calls for the "identification of opportunities for avoidance of or additional protection of special areas" as an element that may be included within the Strategy. Such an inclusion within the ROD speaks to the high importance of avoidance. For the NPR-A, the overall success and goals of mitigation warrant the inclusion of important avoidance areas within the final RMS.

B. Department of the Interior policy on avoidance

Avoidance is intended to identify and protect areas of high conservation value. One of the central features of Secretarial Order 3330, among other Department of the Interior and BLM policies, is an emphasis on protecting areas of high conservation value. The Secretarial Order, for example, specifically calls for "the use of a landscape-scale approach to identify and facilitate investment in key conservation priorities in a region." The recent Department of the Interior Departmental Manual on Implementing Mitigation at the Landscape-scale (Manual) echoes this sentiment and states: "Avoidance should

also be sought for resources and their values, services, and functions with protective legal mandates and those considered important, scarce, or otherwise suitable to achieve goals as identified through landscape-scale strategies, plans, and approaches.” With a goal of the NPR-A’s RMS to “maintain functioning habitat necessary to sustain fish and wildlife species abundance and distribution,”¹³ areas for durable avoidance should be identified and incorporated into the final document.

For the NPR-A’s RMS, avoidance is a crucial step for protecting high value conservation and subsistence resources in the region. It is well known that there are significant hydrocarbon resources in certain portions of the NPR-A, but a variety of laws are intended to protect the natural values of the region for conservation and subsistence purposes. Exploring and producing oil and gas resources, particularly in a rapidly changing climate, cannot come at the expense of the region’s globally significant natural resources and unique subsistence ways of life.

As discussed above, the National Petroleum Reserve Production Act (NPRPA) directed BLM to identify and protect Special Areas and values in the NPR-A, and gave the Secretary full authority to implement federal regulations to set aside areas that contain “significant subsistence, recreational, fish and wildlife, or historical or scenic value.”¹⁴ The regulations published in 1977 pertaining to the NPRPA further clarified “Management and Protection” direction for the Reserve, directing that “Maximum protection measures shall be taken on all actions within the Utukok River Uplands, Colville River and Teshekpuk Lake Special Areas, and any other Special Areas identified by the Secretary as having significant subsistence, recreational, fish and wildlife or historical or scenic value.”¹⁵ With passage of the NPRPA, Congress clearly provided the Secretary with the authority to protect high value areas within the Reserve and gave the Secretary the discretion to determine how best to steward the lands within the Reserve.

C. Irreplaceable natural resources

The recent Presidential Memorandum calls for the protection of “irreplaceable natural resources.” We believe that many of the values of the northeast NPR-A have irreplaceable character; and thus, warrant lasting avoidance measures. The Teshekpuk Lake Special Area is an arctic wetlands complex of global significance. Bird species from every continent use the region to breed and raise their young. This unique arctic wetland ecosystem does not exist anywhere else in the United States or the world. Similarly, the Colville River Special Area is a system that is inextricably linked to the ecological health of the region. Draining approximately one third of the entire North Slope, the Colville River plays an important role in the region’s ecological functions. Without a healthy watershed, a significant portion of the entire region’s ecology has the potential to be negatively impacted. The Teshekpuk Lake and Colville River Special Areas are irreplaceable values that cannot be restored or replaced and BLM has an obligation to protect these resources by ensuring lasting avoidance.

¹³ See: Greater Mooses Tooth One Record of Decision, February 2015.

¹⁴ 42 U.S.C. § 6504(a).

¹⁵ 43 C.F.R. § 2361.1(c).

Moreover, the region's natural systems provide for the unique subsistence way of life that exists in few places on the planet. Subsistence is dependent on a healthy and functioning ecosystem to provide abundant levels of wild resources. Subsistence resources and practices are directly connected to the landscape and its natural resources. Resources closely tied to traditional cultures also cannot be restored or replaced. The significance of this connection should not be overlooked and BLM should take steps to avoid areas that are irreplaceable to subsistence resources and practices.

Additionally, to further underscore the nature of the irreplaceable natural resources in the northeast region of the NPR-A, a recent study suggests that the NPR-A contains highly valued ecosystem conditions and type, namely intact freshwater and wetlands systems.¹⁶ The results of this study – a meta-analysis -- suggest that the NPRA's northeast region, which includes both the Teshekpuk Lake Special Area and the Colville River watershed, contains highly-valued ecosystem types, and these combined with the wilderness character of the region yield a higher value and greater willingness to pay for preservation. By avoiding habitat degradation of the area and providing durable conservation for the unique and primarily undisturbed freshwater systems of the Teshekpuk Lake and Colville River Special Areas, BLM would protect a unique and highly valued American resource.

D. Prioritizing avoidance areas

The NPR-A's 2013 Integrated Activity Plan (IAP) offers an excellent starting point for determining areas that should be avoided. The IAP identified resources and values that are worthy of protection by designating formal "Special Areas" and identifying other areas, such as the Fish Creek buffer, to avoid. The Teshekpuk and Colville River Special Areas are recognition of the region's rich natural resources, and areas that are important to sustain subsistence resources and practices. However, true avoidance has not been achieved within these areas. Areas that are unavailable for leasing and permanent non-subsistence infrastructure only cover a small portion of the Teshekpuk Lake Special Area. However, while some may consider these tracts "avoidance areas", these tracts lack durable protections and can be changed within the next Integrated Activity Plan or with a future development project. As shown by the decision to waive the Fish Creek buffer protections for GMT-1, while the IAP identifies areas to avoid and protect, it does not guarantee durable protections for those areas. Moreover, these tracts do not adequately capture all areas that should be avoided to maintain conservation values or to mitigate against impacts.

The Wilderness Society is actively working to prioritize conservation values in a warmer and uncertain climate to inform landscape-scale mitigation planning in Alaska's rapidly changing Arctic. To better help inform our understanding of areas that have irreplaceable

¹⁶ Valuing type and scope of ecosystem conservation: A meta-analysis; Journal of Forest Economics, January, 2015; Evan Hjerpe, Anwar Hussain, Spencer Phillips; available at: <http://www.journals.elsevier.com/journal-of-forest-economics/most-downloaded-articles/>

natural resources and that warrant avoidance, science staff are using data from the North Slope Rapid Ecoregional Assessment (REA) and other sources to map and model values across the landscape. We anticipate this geographical analysis will be a constructive tool to assist in prioritizing the protection of ecosystem and subsistence values in a changed climate. This effort likely will be completed in the coming months. (For a lengthier summary of these efforts and how they may constructively inform avoidance areas, see Appendix A.)

E. Climate change

The Arctic is warming at approximately twice the rate of the rest of the world. With this warming, dramatic changes will undoubtedly impact the region's landscape and natural values. As we have discussed with you before, large, intact tracts are believed to offer the greatest level of adaptation and resiliency to change.¹⁷

We encourage BLM to take proactive steps to plan for the impacts of climate change in the NPR-A. To do this, durable protections should be applied to durable avoidance areas of current high conservation value and areas of potentially future high conservation importance. Any protections should also take into account future changes that are likely to occur as a result of climate change, to ensure that protections remain meaningful over time. As mentioned above, The Wilderness Society's conservation prioritization efforts will help to inform where these avoidance areas should be located.

F. Achieving avoidance

There is currently no durable avoidance in the NPR-A. GMT-1 has already compromised "avoidance" setbacks that were designated in the IAP for Fish Creek and the Ublutuooh River. Moving forward, BLM should identify core areas of conservation and subsistence importance that should be avoided, such as the Teshekpuk Lake and Colville River Special Areas, and use its existing authorities to ensure that durable avoidance is achieved within the NPR-A. As mentioned above, the management of the NPR-A has not achieved real balance and at this time appears to favor development over conservation. To recalibrate its management approach, BLM should establish a series of avoidance areas within the RMS and then make these areas durably protected through the next National Environmental Policy Act (NEPA) review process and ROD within the NPR-A.

BLM has considerable authority to provide durable avoidance for areas of high conservation and subsistence value. These authorities exist, among others, under the Federal Land Policy and Management Act, the National Petroleum Reserve Production Act, and the Wyden Amendment.¹⁸ These laws allow the use of rights-of-way,

¹⁷ See: Mawdsley, J.R., R. O'Malley, and D.S. Ojima. 2009. A review of climate-change adaptation strategies for wildlife management and biodiversity conservation. *Conservation Biology* 23: 1080-1089.

¹⁸ The Wyden Amendment, 16 U.S.C. 1011, provides: "For fiscal year 1997 and each fiscal year thereafter appropriations made for the Bureau of Land Management ... may be used by the Secretary of the Interior for the purpose of entering into cooperative agreements with the heads of other Federal agencies, Tribal,

easements, leases, and agreements to ensure that durable avoidance is achieved to protect important natural values and systems. (See Appendix B for recent durability agreements between the State of California and BLM.)

While in the latter portion of this letter we will discuss minimization, compensatory mitigation, and mitigation tools in greater detail, it is important to again emphasize that avoidance must be achieved first. Minimization and compensatory mitigation are complementary to greater avoidance efforts. Without avoidance, however, certainty and reduced conflict for all stakeholders will not be achieved.

Recommendations:

- Through the RMS, BLM must take steps to achieve durable avoidance. This includes identifying high value conservation and subsistence areas, such as the Teshekpuk Lake and Colville River Special Areas, that should be avoided, as well as describing the mechanisms for how avoidance will be achieved.
- To better balance conservation and development, avoidance areas should be identified within the RMS and then durably operationalized through the next National Environmental Policy Act (NEPA) review and ROD within the NPR-A, likely the Greater Mooses Tooth Two (GMT-2) development project.

2. Minimization

Following avoidance, minimization is the next tier in the mitigation hierarchy. While “avoidance” can be a form of reducing the impact that development has on the landscape, the specific goals of minimization are to decrease the effects that land use changes have on natural systems. Minimization can be achieved at both the project and landscape levels.

A. Project level minimization for future development

Project level minimization takes place through Lease Stipulations, Best Management Practices (BMPs), encouraging utilization of best technologies, and Interior’s and other agencies’ permitting processes. Note that strict adherence to and monitoring and enforcement of stipulations, BMPs, and permits are essential to effectively implement federal minimization policies.

For future developments covered by the RMS, additional project level minimization requirements should be part of the RMS that were not part of the GMT-1 approval. These minimization measures – which all are feasible and currently-used practices elsewhere – include:

State, and local governments, private and nonprofit entities, and landowners for the protection, restoration, and enhancement of fish and wildlife habitat and other resources on public or private land and the reduction of risk from natural disaster where public safety is threatened that benefit these resources on public lands within the watershed.”

- Development of a Health Impact Assessment (HIA) for each new project. This HIA would examine how direct impacts to the region's ecosystem and subsistence resources would affect community structure and the public's health, and would propose alternatives that best mitigate impacts to subsistence, community structure, and health and wellness.
- Utilizing high-accuracy pipeline leak detection measures in sensitive areas such as high consequence watersheds.
- Utilizing automatic shut-off, rather than manual shut-off, pipeline valves to protect high consequence watersheds. As discussed in the GMT-1 FSEIS, changing to automated from manual valves at the Ublutuoch River likely would reduce releases into the river from 15,234 barrels (639,828 gallons) to 626 barrels (26,292 gallons) of fluids (oil, water, gas).¹¹
- Explicitly prohibiting roads along transmission pipelines to new projects. The impacts of such roads include: adverse effects on wildlife and fish; private and commercial vehicle traffic which increases hunting access and pressure on caribou, waterfowl and other species, and; habitat loss and degradation under and adjacent to roads.
- Separating oil, gas, and water at each well-pad. This type of separation occurs at many offshore platforms, so it's clearly achievable onshore as well, albeit at a potentially higher cost than a more centralized separation facility. Separation allows better leak detection for and less corrosion of pipelines, and improved oil recovery through natural gas injection.
- Minimizing aircraft flights through alternatives such as ground transport along rights-of-way for relatively short distances, setting up field camps, utilizing boats, etc.

B. Landscape level minimization for future development

Certain development activities have broad, adverse effects on a landscape through cumulative impacts, through their areal extent (e.g., roads and pipelines), and by affecting connected landscape elements (e.g., wildlife migratory corridors on land and water). The RMS should ensure that future NEPA analyses address these landscape level effects, and the need for conservation planning.

C. Conservation Planning

The NPR-A's IAP involves some significant complexities regarding how conservation and subsistence values will be protected while allowing development activities on or near lands that have varying levels of restricted activities. To effectively achieve true minimization, BLM needs to establish standards and criteria for how lands will be managed for the NPR-A's only avoidance area (directly around Teshekpuk Lake), on Special Area lands that are closed to leasing but open for some level of permanent infrastructure like roads and pipelines, on Special Area lands that are open to leasing, and on lands outside of Special Areas that are open to leasing but still have important conservation value. Without standards and management objectives, there is considerable uncertainty for how resources will be conserved and how industry is expected to operate.

To ensure the conservation and protection of special resource values in the NPR-A and minimize the impacts of development, BLM should develop conservation plans for the region, and particularly for the Teshekpuk Lake and Colville River Special Areas. These formal conservation plans would complement the IAP to better refine land stewardship goals in order to maintain ecological and subsistence values, and to minimize the potential effects of development. Among other features, these plans would address wildlife populations and habitat protections, ecosystem connectivity, and climate resilience. Conservation plans would also establish standards for how and where exploration and development activities are permitted to impact the region. For example, how much infrastructure (like pipelines or roads) is allowed in particular areas.

Oil exploration in Smith Bay exemplifies the need for why formal conservation planning is needed. Our organizations have requested numerous times over the past several years that BLM develop management prescriptions for the NPR-A's Special Areas. Now with exploration activities being enabled by lands and waters of the Teshekpuk Lake Special Area, BLM is not effectively avoiding or minimizing impacts from development within and around this area of ecological and subsistence importance. For example, snow roads are being constructed through the Teshekpuk Caribou Herd's wintering grounds during a time of extremely harsh conditions, resource scarcity, and gestation. Conservation management plans would have helped ensure better and more responsible management by minimizing these snow road's impacts on the herd.

To complement these Special Area conservation management plans, we encourage BLM to sign a memorandum of understanding (MOU) with the U.S. Fish and Wildlife Service and the U.S. Geological Survey. Both of these federal agencies have high levels of expertise to assist in monitoring, studying, and managing important conservation and subsistence values. Moreover, while we discuss this in the latter portions of this letter, conservation area plans with an associated MOU would not only minimize the effects of development on the landscape, but it would inform how future avoidance and compensatory mitigation actions should be directed and appropriately prioritized.

D. Cumulative impacts

The RMS needs to ensure minimization of the cumulative impacts of multiple and/or expanded developments. The cumulative impacts of developments on the landscape may degrade ecological functions and subsistence more than what would be revealed in a project level analysis. For example, developments by different operators may not utilize common roads or pipelines, thus resulting in unnecessarily expansive footprints on the landscape. As another example, surrounding key wildlife habitat or a village with multiple or expanded developments can greatly reduce the viability of the wildlife population or village subsistence opportunities.

Development also can result in wildlife displacement. At some point, continued additions and/or expansions of development may fragment the landscape and reduce remaining habitat quality such that there is insufficient habitat to accommodate displaced wildlife.

In that case, new development may need to be avoided or minimized/modified to prevent these serious, adverse effects.

E. Areal extent

Roads, including temporary ice and snow roads, and pipelines extend many miles through a landscape and can result in a number of problematic impacts. These include construction and vehicle impacts on wildlife including noise, air pollution, spills, cleanups (if needed); disruptions/barriers to wildlife or subsistence-related movement; and the loss of wilderness qualities. It is important to recognize that these adverse effects often extend beyond the immediate “footprint” of the pipelines or roads, increasing the affected area across the landscape. Multiple roads and pipelines from single or multiple projects further increase adverse impacts. For these reasons, minimizing the impact of projects should include the elimination of roads where feasible, or minimizing the mileage of, temporary or permanent roads.

We recommend that BLM utilize a full Environmental Impact Statement process for all projects affecting the NPR-A, including state offshore drilling projects with onshore components, so that road and pipeline projects receive a full review of alternative designs and operating standards, along with public input.¹⁹

F. Roads

BLM should consider developing parameters, a rationale or framework that would limit the number or distance of roads connecting developments, so as to avoid allowing a road network that one day may cross the entire NPR-A from east to west and/or north to south. Roads that are connected across the NPR-A would convert the unique habitat of the NPR-A by increasing human access and expanding human activities in the NPR-A, including, likely, commercial activities. Human use of any roads in the NPR-A will likely last long after oil and gas companies have come and gone, and most all of the road impacts will continue as long as the roads are passable.²⁰

G. Connected landscape elements

Migratory wildlife in the Arctic, including caribou and fish such as broad whitefish (which travels between lake systems during breakup), require intact, connected landscape elements to thrive. If key landscape elements are degraded through industrial development there can be serious wildlife impacts. This can be true even if the degradation occurs at just a single point in a connected system or if it includes actions typically considered less invasive, like water withdrawals. The RMS will be used to inform future NEPA analyses and needs to ensure that connected landscape elements are

¹⁹ Note that the Caelus right-of-way for offshore drilling on state leases only had an Environmental Assessment and not an Environmental Impact Statement by BLM, even though the proposed action includes two snow road projects and extensive onshore infrastructure (see <https://eplanning.blm.gov/epl-frontoffice/eplanning/projectSummary.do?methodName=renderDefaultProjectSummary&projectId=52907>)

²⁰ See Appendix B: “Ecological Impacts of Roads.”

protected in their entirety. Such protection may require development avoidance or minimization/modification to prevent adverse impacts.

Recommendations:

- In order to ensure conservation and protection of subsistence and ecological resources, BLM should complete formal management prescriptions for the Teshekpuk Lake and Colville River Special Areas, and sign an MOU with the U.S. Fish and Wildlife Service and the U.S. Geological Survey.
- The RMS should ensure that future NEPA analyses address landscape level effects, i.e., cumulative impacts, areal extent, and connected landscape elements.
- BLM should utilize a full Environmental Impact Statement process for all projects affecting the NPR-A, including state offshore drilling projects with onshore components, so that road and pipeline projects receive a full review of alternative designs and operating standards, along with public input.
- Restrict the development of roads within the NPR-A so that a network of roads is not developed that reaches from one side of the NPR-A to the other – east to west, or north to south.
- Connected landscape elements must be protected in their entirety, which may require development avoidance or minimization/modification to prevent adverse impacts.

3. Compensatory Mitigation

In the following section we discuss the importance of compensatory mitigation as part of achieving the mitigation hierarchy. Here, we discuss the goals of compensatory actions and how these objectives can be achieved. Compensatory mitigation actions can and should be used to protect conservation and subsistence areas on the landscape. While it is important that core conservation and subsistence areas are first protected through thoughtful and lasting avoidance, and secondarily, minimization, compensatory mitigation actions must also be used to ensure that high conservation value areas and ecosystem processes are maintained with increasing development activities.

A. Goals of compensatory mitigation

Despite efforts to avoid and minimize the impacts of energy development in the NPR-A, there will always be unavoidable impacts that affect the values of the region. Oil development in the near-pristine Arctic has unavoidable impacts to conservation and subsistence values. Development, for example, is already disrupting the globally significant aquatic environment of the region and impacting the movement and health of the Teshekpuk Caribou Herd. These impacts are far greater than the “footprint” of the development project and warrant compensatory actions that extend beyond the impacts accounted for through established wetland compensatory mitigation actions (e.g. 2008 Wetlands Mitigation Rule).

Goals of compensatory mitigation in the NPR-A should focus on the protection of high value conservation and subsistence areas that were not safeguarded by avoidance or

minimization. Compensatory mitigation actions should also be used to maintain ecosystem functions, such as aquatic systems, and landscape-level processes like caribou migrations.

B. Protection before impacts

The recent Presidential Memorandum and Departmental Manual emphasize the importance of conserving high value areas before they are impacted by development. These directives instruct agencies to take proactive compensatory mitigation measures before impacts occur so that natural values and processes are secured and at a reduced risk of being compromised by future development impacts. The recent Presidential Memorandum specifically speaks to the need for “upfront” protections. The memorandum specifically reads: “Advance compensation means a form of compensatory mitigation for which measurable environmental benefits (defined by performance standards) are achieved before a given project’s harmful impacts to natural resources occur.”²¹ The Department of the Interior Departmental Manual also emphasizes this point and reads: “When compensatory mitigation is necessary, the Department notes a preference for compensatory mitigation measures that: (a) maximize the benefit to impacted resources and their values, services, and functions; and (b) are implemented and earn credits in advance of project impacts.”²²

To achieve protection before impacts, we encourage the BLM to establish a set of compensatory mitigation “pools.” These pools would be tracts of land established in advance of developments’ impacts so that conservation and subsistence values are ensured while development is allowed to proceed in other areas. Over time, compensatory actions could “fill in” these pools with durable mitigation actions. An example of a “pool” may be an important area that is used for caribou migration between features of the landscape or an important nesting or molting area for birds like Pacific Black Brant and Greater White-Fronted Geese. Special Areas may also be viable pools.

To maintain the viability of these “pools” to effectively offset future impacts from development in the region, these areas must be stewarded for their conservation values. To achieve this level of stewardship, and as discussed above, we encourage BLM to utilize compensatory mitigation funds to complete detailed conservation management plans. These plans would establish management prescriptions and goals to ensure the protection of conservation and subsistence resources. Without active management the value of these pools could be lost and the goals of protecting important lands as a form of compensatory mitigation would not be achieved.

To ensure sound stewardship of these proactively protected areas, the memorandum of understanding (MOU), discussed above, between BLM and the U.S Fish and Wildlife Service and the U.S Geological Survey would also be constructive in this context. These

²¹ Available at: <https://www.whitehouse.gov/the-press-office/2015/11/03/mitigating-impacts-natural-resources-development-and-encouraging-related>

²² See: Department of the Interior Departmental Manual, Chapter 6: Implementing Mitigation at the Landscape-scale, Office of Policy Analysis, 23 October 2015.

two federal agencies have extensive experience in the Arctic managing migratory species, like birds, and have excellent scientific capacity to study and monitor population health, and to assist in management.

C. Proportional conservation protections

BLM's mitigation guidance requires that mitigation result in a minimum of no net loss of resources and values, with a net gain goal as required or appropriate. Measuring the total direct, indirect and cumulative impacts from oil and gas development in a landscape like the NPR-A is challenging, given that many of the natural and subsistence resources are part of a huge and delicately interconnected system that spans millions of acres and a variety of habitats and ecosystems. Caribou migration corridors cross thousands of miles; river, wetland and groundwater systems connect throughout the region; and migration and breeding habitat for a multitude of bird species are only a few examples of the large and interconnected nature of this landscape.

Because of the nature of this landscape, direct impacts and indirect impacts to a relatively small number of acres can result in ripple effects throughout the system, especially when the impacts are in sensitive areas such as the Fish Creek setback. The nature of this system requires that the area encompassed by the RMS compensatory mitigation be much greater than the area of direct, indirect and cumulative impacts.

The nature and success rate of compensatory mitigation measures also requires that the compensatory mitigation encompass an area much larger than the area of impacts. For preservation and acquisition to meet additionality requirements, calculations must be made that consider the "background rate of loss" in the region to understand the amount of benefits provided by these tools per acre. In an area like the NPR-A with extremely low background rates of loss, very large areas must be preserved or acquired to ensure additionality. Restoration must also be proportional given potential failure of restoration actions and time needed to achieve conservation benefits from restoration.

Finally, compensatory mitigation must result in conservation gains that can be managed to maintain ecosystem and resource functionality. For many resources in the NPR-A, functionality requires large areas to be encompassed. BLM has described this type of requirement in other areas, including with regards to compensatory mitigation for impacts to Lands with Wilderness Characteristics in its Solar Programmatic Environmental Impact Statement (PEIS), which describes the following tool as one method for compensatory mitigation:

Enacting management to protect lands with wilderness characteristics in the same field office or region that are not currently being managed to protect wilderness character. Areas that are to be managed to protect wilderness characteristics under this approach must be of sufficient size to be manageable, which could also include areas adjacent to current WSAs or adjacent to areas currently being managed to protect wilderness characteristics. Solar PEIS ROD at 54-56, emphasis added.

Though we have not developed a specific recommended formula or ratio for the proportionality of conservation from compensatory mitigation for the RMS, the factors described above clearly indicate the need for compensatory mitigation to encompass an area of several factors of magnitude greater than the area of direct, indirect and cumulative impacts from development.

One example of how BLM has effectively mitigated for loss of resources and values on public lands from development can be found in the McCoy Solar project in California. As part of mitigation, BLM can commit to managing land for conservation purposes, identifying specific values that will be preserved, heightened and restored within a specific area to compensate for impacts in another area. Management can occur through designating new areas, such as Special Areas in the NPR-A or areas of critical environmental concern in other BLM units, enhancing management through specific management prescriptions or committing to specific projects within such areas. For McCoy Solar, BLM's environmental analysis found that development of Phase 2 of this solar project would result in the loss of 1,000 acres of BLM-inventoried lands with wilderness characteristics. To mitigate these impacts, before disturbing any lands with wilderness characteristics, the developer is required to make a payment of \$250,000 to BLM to fund work to remove and restore approximately 15 miles of unauthorized vehicle routes; convert approximately three miles of vehicle route into a hiking trail; and install vehicle barriers and signing along publicly accessible portions of the wilderness boundaries. These actions will occur in the nearby Big Maria Mountains and Palen-McCoy Wilderness Areas or other designated wilderness areas near the project.

D. Mitigation fees

Compensatory mitigation fees are another crucial component of a successful RMS. With land use changes and development disturbances, fees are necessary to fund the mitigation actions that will ensure the protection of natural areas and processes. Fees need to be high enough to allow for effective stewardship, which includes land and resource protections, sound monitoring, and mechanisms to ensure effective adaptive management. Working in the Arctic is expensive and these endeavors will likely be costly. If fees are inadequate to meet effective management standards, the goals of mitigation will not be achieved and development will continue to disproportionately impact subsistence and conservation values.

Compensatory mitigation fees are an important component of the RMS. Fees add needed certainty for development interests because they provide a known cost of doing business. Among other features, fees should have the following features:

- Be defensible to industry, elected officials, and the public at large
- Be easily replicated so that principles are consistently and fairly applied to all future developments
- Be reducible in order to incentivize development in lower conservation and subsistence value areas

- Be based on specific actions that will ensure that conservation values are protected
- Be high enough for BLM to effectively achieve its mandate to protect conservation and subsistence areas and values

E. Mitigation tools and durability

In previous letters, we have described a series of mitigation actions that we believe BLM should utilize to achieve effective stewardship of the NPR-A. These tools include the use of conservation easements and rights-of-way. With regards to ensuring that mitigation is durable, a recent Memorandum of Understanding (MOU) between the BLM and the California Department of Fish and Wildlife provides additional details on tools that BLM can use to increase the durability of mitigation on public lands.²³ The MOU endorses the use of various “land use authorizations” to achieve mitigation, including “rights-of-way pursuant to 43 U.S.C. § 1761, et seq.; permits, leases or easements pursuant to 43 U.S.C. § 1731, et seq., and 43 C.F.R. § 2920; leases pursuant to the Recreation and Public Purposes Act (RPPA), 43 U.S.C. § 869, et seq.; and terms and conditions on such land use authorizations that are necessary to meet state permitting or compensatory mitigation requirements.”²⁴ This is in addition to BLM’s broad authority under the Naval Petroleum Reserves Production Act to “grant such rights-of-way, licenses, and permits as may be necessary to carry out [its] responsibilities” in the Reserve.²⁵

BLM already provides rights-of-way, easements and RPPA leases for extended terms, including issuing these instruments “in perpetuity.” Consequently, using these tools allows for the mitigation actions authorized through the RMS to be of sufficient length and certainty – “durability” – to provide assurance that mitigation can be tailored to the duration of impacts and restoration for oil and gas activities authorized under the NPR-A IAP.

The MOU between the State of California and BLM endorses BLM’s authority to use these traditional land authorizations to ensure durable mitigation that provides additive conservation. In addition, the MOU describes the types of “Compensatory Mitigation Actions” that can be achieved using these tools, including actions such as fencing, restoration and developing habitat or water sources, but also management actions like increasing law enforcement patrols or increasing educational outreach.²⁶ Implementing strengthened management prescriptions for Special Areas in the NPR-A could be achieved using these authorizations, as could the other types of activities contemplated in the MOU. BLM should use these tools to add durability to mitigation measures that will be implemented through the NPR-A’s RMS.

²³ See: http://www.drecp.org/documents/docs/2015_Durability_Agreement_BLM_CAFW.pdf and the documents attached to these comments in Appendix B.

²⁴ MOU, Section C.4.b, p. 3.

²⁵ 42 U.S.C. §6502

²⁶ MOU, Section C.4.a, p. 3.

F. Locations for compensatory mitigation action

As discussed above, The Wilderness Society is currently working to better understand the NPR-A's conservation and subsistence values in a warmer and uncertain future. Like with identifying important areas for avoidance, this geographical analysis will also inform areas where compensatory mitigation can potentially take place. While lasting protections of the NPR-A's Special Areas is our highest priority, we will be providing BLM more detailed maps in the coming weeks about where additional compensatory actions should take place.

G. BLM should solely use the phrase “unavoidable impacts”

The goal of compensatory mitigation is to offset impacts that remain despite efforts to reduce developments' effects on ecological and subsistence values. However, BLM staff often uses the phrase “residual impacts” to describe the goal and purpose of compensatory actions. We believe that the use of this term is confusing and inaccurate. For the purposes of clarity, we encourage the BLM to only use the term “unavoidable.”

The term “residual” does not effectively capture the intent and meaning behind why compensatory actions are needed. The word “residual” can imply that while impacts may remain, in theory, they can be managed and dealt with in order to have no impact. In reality, compensatory mitigation actions offset impacts that are truly unavoidable and that will remain. “Residual” removes the significance that development will have negative impacts on the landscape forever.

H. Mitigating unavoidable impacts from GMT-1 to subsistence

As stated above, subsistence is dependent on a healthy and functioning ecosystem to provide abundant levels of wild resources. BLM has identified impacts to subsistence as the focus of mitigation for the GMT-1 development, and BLM appears to be focused on the “social” impacts to subsistence. However, subsistence resources and practices are directly connected to the landscape and its natural resources. BLM need only turn to the Alaska National Interest Lands Conservation Act (ANILCA) to recognize this relationship in a legal and policy context. ANILCA addresses the relationship between subsistence activities and natural resources, and the need to protect and maintain access to those resources in order to provide assurance to subsistence users. While there is no question that subsistence activities and a subsistence way of life have deeply rooted social components and aspects, without the natural resource component, subsistence would not thrive.

The direct impacts of GMT-1 are to the physical environment. GMT-1 development includes a road, pipeline, vehicle traffic and other activities that will compromise a sensitive subsistence use area and result in unavoidable impacts to the physical and social environment. One of the impacts from placing infrastructure in important subsistence use areas is displacement, which makes it all the more important to ensure that remaining subsistence use areas are protected. To mitigate for the harm to local people caused by

impacting an important subsistence use area and to protect the remaining subsistence use areas, BLM should consider establishing with the input of residents of Nuiqsut another subsistence use area that is off-limits to oil and gas leasing, exploration, development and infrastructure. The restrictions to the new subsistence area should be permanent or for the life of the impacts of the development. These protections could potentially be achieved through the use of tools such as conservation easements and rights-of-way that durably protect key subsistence access routes and use areas. This is an example of an additive conservation measure, aimed at mitigating the harm locals will experience from compromising the Fish Creek setback area that would ensure future opportunities for subsistence activities. We urge BLM to include examples similar to this in the RMS as part of the suite of mitigation measures that could be pursued in the future.

Recommendations:

- BLM should identify and protect pools of land where future compensatory actions can take place. These lands would have detailed conservation management plans, also paid for through compensatory funds, to ensure their viability as effective offsets for the impacts of development-related activities.
- To address the large, interconnected nature of the resources and values in the NPR-A, the nature of the mitigation tools available, and the need for compensatory mitigation areas to be manageable in the context of ecosystem and resource functionality, the compensatory mitigation must encompass an area of several factors of magnitude greater than the area of direct, indirect and cumulative impacts from development.
- To offset the unavoidable impacts from GMT-1 to subsistence, BLM needs to durably protect the systems and places that make subsistence possible.

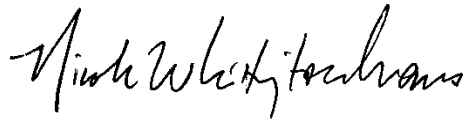
IV. Conclusion

The BLM has a statutory obligation to protect the unique ecological and subsistence values of the NPR-A. To do this will require intensive and thoughtful stewardship largely guided by the RMS. Balancing energy development and natural resource protection is a challenging endeavor but can be accomplished. Central to this success, however, is an understanding that real conservation protections are needed and that it will require a greater land area devoted to conservation than to development in order to maintain ecosystem functions and processes in the warming Arctic.

As we move forward with the NPR-A's Regional Mitigation Strategy, we encourage BLM to follow the plethora of departmental and agency guidance, and to utilize its existing authorities to fulfill the goals and objectives of the *entire* mitigation hierarchy.

We appreciate you taking the time to consider these comments. And again, thank you for your hard work on this important effort.

Sincerely,

A handwritten signature in black ink, appearing to read "Nicole Whittington-Evans". The signature is fluid and cursive, with the first name "Nicole" being more prominent.

Nicole Whittington-Evans
Alaska Regional Director
The Wilderness Society

On behalf of:

Jessica Girard
Program Director
Northern Alaska Environmental Center

Cc: Jan Caulfield
Molly Cobbs
Steve Cohn
Mike Dwyer
Stacy Fritz
Joshua Hanson
Stacie McIntosh
Matthew Preston
Tahnee Robertson
Bob Sullivan
Serena Sweet
Jason Taylor

Appendix A:

Efforts by The Wilderness Society to prioritize
conservation values to inform landscape-scale mitigation
planning in Alaska's changing Arctic

Prioritizing conservation values to inform landscape-scale mitigation planning in Alaska's changing Arctic

Knowing where values and vulnerabilities occur across landscapes and regions should be a first step in developing conservation strategies (Dickson et al. 2014). Effective conservation planning depends on assessing and mapping the values that we hope to sustain through natural resource management and long term protection. Spatial data depicting various environmental, climatic, vegetation, subsistence, and land use characteristics are increasingly available to the public, which allows scientists, resource managers, and other stakeholders to overlay data and investigate multiple values simultaneously (e.g., Aplet et al. 2000, Leu et al. 2008, Theobald 2010).

The discipline of conservation biology emphasizes the development of networks of protected areas and strategies focused on large landscapes spanning a range of human land use and ecological conditions (Lindenmayer et al. 2008). A singular focus on designating core protected lands has given way to linking networks of protected areas while creating strategies that sustain conservation values in rapidly developing areas. A holistic conservation vision emerging from such strategies is vital to maintaining diverse land values in a time of rapid human change. Complicating this vision are the uncertain but imminent impacts of climate change that may alter current values and strategies.

Recognizing these challenges and opportunities, The Wilderness Society is engaging in efforts to overlay conservation and subsistence values and to prioritize them in light of climate change and attendant uncertainty. The Regional Mitigation Strategy (RMS) being developed by the Bureau of Land Management (BLM) for the National Petroleum Reserve – Alaska (NPR-A) includes identifying key areas where mitigation efforts will be focused to balance development impacts.

The first step in conducting a prioritization assessment is to identify key conservation values. For the Alaskan Arctic, these include:

Wildness

Wildness indicates how well an area reflects a pristine ecosystem free of intentional human effects (Aplet et al. 2000). It includes ecosystem integrity as well as the ability to offer solitude and remote experiences. Areas with high wildness represent natural ecosystems with an absence of direct human control over ecological processes and are The Wilderness Society's highest conservation priority.

Ecosystem representation

Protected areas can best meet conservation goals if they represent all ecosystems (Dietz et al. 2015). This approach assumes that protected areas more fully conserve genetic, species, and community diversity when they encompass the full variety of ecosystem types across their geographic range (Olson and Dinerstein 1998; Margules and Pressey 2000). Representation indicates how well various ecosystem types are included in existing protected areas and emphasizes where underrepresented ecosystems occur that may be prioritized for future protection (Dietz et al. 2015).

Wildlife biodiversity

Conserving wild ecosystems of the future requires ensuring that the species that exist today are sustained as the building blocks of future ecosystems. By protecting “hotspots” of species diversity, we protect genes, species and communities at multiple scales, helping preserve functioning ecosystems that are more resilient to disturbance (Harris et al. 1996; Poff et al. 1997) and that reduce the risk of large extinctions (Schindler et al. 2010).

Connectivity

Connected landscapes support ecological and evolutionary processes that require large areas, such as movement, gene flow and range shifts (Beier et al. 2011). The importance of connectivity is well recognized (Taylor et al. 1993; Cushman et al. 2013), as movement of individuals is essential both for short-term persistence of populations (Fahrig 2003; Cushman 2006) and for longer-term shifts in species range in response to climate change (Heller and Zavaleta 2009). In the Arctic, connectivity is particularly important because resources are sparse, requiring many species to migrate long distances to maximize growth, reproduction and survival.

Subsistence use areas

Areas heavily used for subsistence hunting, fishing, and gathering provide important cultural human values. They represent the intersection of important wildlife habitat and human use near local communities. Subsistence activities have occurred in the Arctic for thousands of years and depend on an intact environment, aligning well with conservation priorities.

Assessing climate resilience

The values above can be combined to identify areas of high conservation value. These values can then be brought together with an assessment of climate vulnerability/resilience to identify areas of high conservation priority (Fig. 1). Variability in climate regimes associated with topographic complexity and geological parent material may allow species and ecosystems greater opportunities to find suitable habitat and climate niches compared to less topographically complex landscapes. Prioritizing such resilient areas for protection increases the likelihood of achieving sustainable conservation over the long term (Mawdsley et al. 2009).

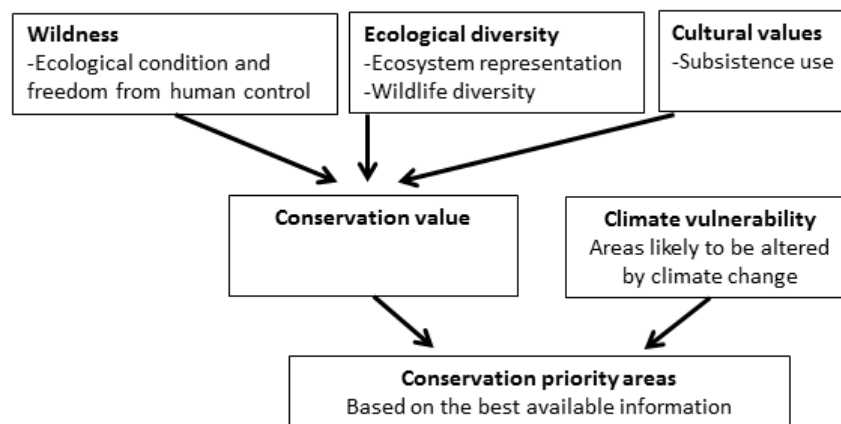


Figure 1: Flow diagram showing the process used to identify conservation priority areas in the Arctic. The areas identified occupy the lower right hand corner of Figure 2.

Conservation portfolio approach

The Wilderness Society is developing a framework to use the relationship between conservation values and climate change to inform management decisions nationwide by placing them on separate axes (Fig. 2). Where conservation value is high and climate change is low, places with high ecological integrity and subsistence value may be sustained in the future with a protection strategy akin to wilderness. Where conservation value is low and climate change will be slow, the historical climate may persist and historical ecosystem composition, structure, and function may be improved through ecological restoration. Where conservation value is low but climate change is anticipated to be great, there may be opportunities to experiment with new conditions that sustain important ecological building blocks, even if the ecologies of these places are novel with respect to the past. Where conservation values are high and climate change will be rapid (or where we simply do not know the direction of future climate), it is much less clear which option will lead to the best outcome. There, it makes most sense to take a “portfolio approach” to conservation, where risk is spread among all three management responses to climate change in wildland systems: accepting change, engaging in restoration to resist change, or trying to anticipate where the climate is going and manage ecosystems into a more resilient condition.

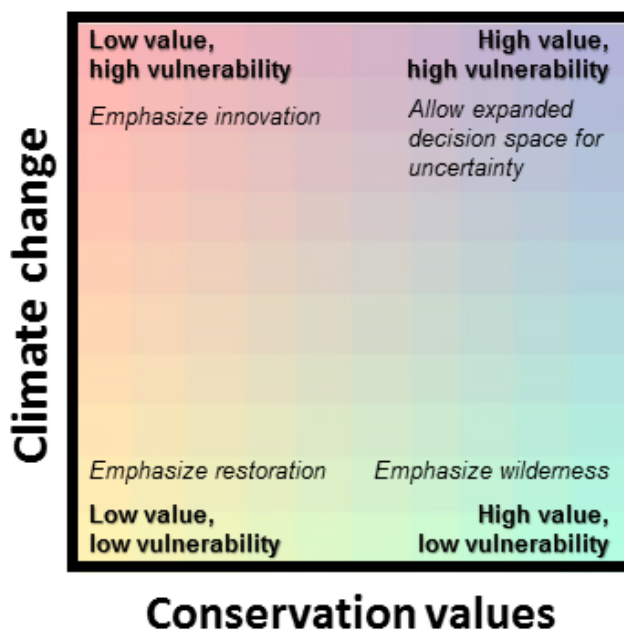


Figure 2: Suggested management prescriptions for areas with varying degrees of climate change resilience and wildland values

In the NPR-A, portfolio approach thinking can suggest different actions from the mitigation hierarchy in different locations based on the compilation of their conservation value and likelihood of change. Areas in the lower right hand corner of Fig. 2 may be of prime importance for avoidance or for more durable forms of compensatory mitigation, such as conservation easements. Areas falling on the left half of Fig. 2 may be more suitable for development, but also offer exciting opportunities for compensatory restoration and/or innovation as well as the potential for maintaining important connectivity for mobile species. As is suggested by the national framework above, the upper right corner of Fig. 2 is the most challenging and the precautionary principle suggests spreading out risk across various management actions and ensuring monitoring to enable adaptive management as future changes are revealed.

In summary, compiling spatial data on conservation values offers BLM a tool to defensibly prioritize future mitigation areas with respect to conservation values and climate change. The Wilderness Society is currently engaging in a spatial prioritization analysis and is happy to share the results with BLM and other interested parties upon completion.

References

- Aplet G, Thomson J, Wilbert M. 2000. Indicators of wildness: using attributes of the land to assess the context of wilderness. In: SF McCool, DN Cole, WT Borrie, J O'Loughlin (Comps.) *Wilderness science in a time of change conference—Volume 2: Wilderness within the context of larger systems*; 1999 May 23-27; Missoula, MT. Proceedings RMRS-P-15-VOL-2. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.
- Beier P, Spencer W, Baldwin RF, McRae BH. 2011. Toward best practices for developing regional connectivity maps. *Conservation Biology* 25:879-892.
- Cushman SA. 2006. Effects of habitat loss and fragmentation on amphibians: a review and prospectus. *Biological Conservation* 128:231-240.
- Cushman SA, McRae B, Adriaensen F, Beier P, Shirley M, Zeller K. 2013. Biological corridors and connectivity. In: DW Macdonald, KJ Willis (Eds.) *Key Topics in Conservation Biology* 2. John Wiley & Sons, Ltd. pp.384-404.
- Dickson BG, Zachmann LJ, Albano CM. 2014. Systematic identification of potential conservation priority areas on roadless Bureau of Land Management lands in the western United States. *Biological Conservation* 178:117-127.
- Dietz MS, Belote RT, Aplet GH, Aycrigg JL. 2015. The world's largest wilderness preservation system after 50 years: An assessment of ecological system representation in the U.S. National Wilderness Preservation System. *Biological Conservation* 184: 431-438.
- Fahrig L. 2003. Effects of habitat fragmentation on biodiversity. *Annual Review of Ecology, Evolution and Systematics* 34:487-515.
- Harris LD, Hootch TS, Gergel SE. 1996. Landscape processes and their significance to biodiversity conservation. In: OE Rhodes Jr., RK Chesser, MH Smith (Eds.). *Population Dynamics in Ecological Space and Time*. University of Chicago Press. pp.319-347.
- Heller NE, Zavaleta EA. 2009. Biodiversity management in the face of climate change: a review of 22 years of recommendations. *Biological Conservation* 142:14-32.
- Leu M, Hanser SE, Knick ST. 2008. The human footprint in the west: A large-scale analysis of anthropogenic impacts. *Ecological Applications* 18:1119-1139.
- Lindenmayer D, Hobbs RJ, Montague-Drake R, Alexandra J, Bennett A, Burgman M, Cale P, Calhoun A, Cramer V, Cullen P, Driscoll D, Fahrig L, Fischer J, Franklin J, Haila Y, Hunter M, Gibbons P, Lake S, Luck G, MacGregor C, McIntyre S, Mac Nally R, Manning A, Miller J, Mooney H, Noss R, Possingham H, Saunders D, Schmiegelow F, Scott M, Simberloff D, Sisk T, Tabor G, Walker B, Wiens J, Woinarski J, Zavaleta E. 2008. A checklist for ecological management of landscapes for conservation. *Ecology Letters* 11:78-91.
- Margules CR, RL Pressey. 2000. Systematic conservation planning. *Nature* 405:243-253.
- Mawdsley JR, O'Malley R, Ojima DS. 2009. A review of climate-change adaptation strategies for wildlife management and biodiversity conservation. *Conservation Biology* 23:1080-1089.
- Olson DM, Dinerstein E. 1998. The global 200: a representation approach to conserving the earth's most biologically valuable ecoregions. *Conservation Biology* 12:502-515.
- Poff NL, Allan JD, Bain MB, Karr JR, Prestegard KL, Richter BD, Sparks RE, Stromberg JC. 1997. The natural flow regime. *BioScience* 47:769-784.
- Schindler DE, Hilborn R, Chasco B, Boatright CP, Quinn TP, Rogers LA, Webster MS. 2010. Population diversity and the portfolio effect in an exploited species. *Nature* 465:609-612.
- Taylor PD, Fahrig L, Henein K, Merriam G. 1993. Connectivity is a vital element of landscape structure. *Oikos* 68:571-573.
- Theobald DM 2010. Estimating natural landscape changes from 1992 to 2030 in the conterminous U.S. *Landscape Ecology* 25: 999-1011.

Appendix B:

Ecological Impacts of Roads



Fact Sheet: National Petroleum Reserve - Alaska

Ecological Impacts of Roads

Roads have a profound effect on wildlife. Every year millions of mammals, birds, and amphibians are killed by vehicles traveling on America's roads. The indirect impacts of roads on wildlife and their habitats can be just as damaging. For example, roads affect wildlife behavior and movement, contribute to air, water, and noise pollution, and can permanently alter habitats and entire ecosystems.

The following ecological effects of roads are well documented in scientific literature:

- Animal mortality from road construction
- Animal mortality from collisions with vehicles
- Modification of animal behavior, for example road avoidance and interference with nesting, breeding, foraging and migration
- Alteration of the physical environment, including direct loss of habitat, fragmentation of previously connected habitats, impacts to the environment from dust and degradation of aquatic habitats as a result of altered stream flows, runoff rates, sedimentation, and changes to temperature, soil content and soil density
- Alteration of the chemical environment, including introduction of nutrients, organic molecules, and pollutants such as oil, salt, heavy metals, ozone and exhaust from cars
- Introduction and spread of exotic species
- Increased human access and impacts, including illegal hunting and off-road vehicle use

Each of these examples should be considered among the potential cumulative—and likely irreversible—effects of permanent roads within the NPR-A. Species that rely on wetlands and streams (shorebirds, waterfowl and broad white fish), and species with large home ranges (polar and brown bears and caribou), are especially vulnerable to roads.

Roads fragment habitat

Roads are a significant cause of habitat fragmentation, and fragmentation can have many adverse effects. For example, by dividing and isolating populations, fragmentation can affect species genetics and increase the likelihood of population decline as species become more prone to disease and inbreeding.

Also, by creating new edge and core areas, habitat fragmentation can:

- change habitat composition
- create microclimate changes, including potential permafrost alterations
- alter flows of energy and nutrients
- result in changes to the type and quality of food available, and
- alter species compositions, disrupting natural distributions and whole system balances

Roads alter wetlands

The Teshekpuk Lake Special Area in the northeast NPR-A is part of the largest wetlands complex in the circumpolar Arctic and hosts some of the highest densities of nesting shorebirds throughout the global Arctic region. Roads can impound wetlands and change their hydrology and ecological function, even if culverts are used. For example, road and bridge construction activities can increase sediment loading to wetlands. Even after road construction, rainfall, ice-melt - including Alaska's spring "break-up" - and snowmelt carry sediments, organic matter, heavy metals, hydrocarbons, road salts, and debris into streams and wetlands. The

result is increased salinity, turbidity, and toxicity and decreased dissolved oxygen, impacts that affect aquatic life and ultimately the larger food web.

Road maintenance also contributes many chemicals to wetlands. Herbicides, soil stabilizers, and dust palliatives used along roadways can damage wetland plants and the chemicals may concentrate in aquatic life or cause mortality. Furthermore, bridge maintenance may contribute lead, rust (iron), and the chemicals from paint, solvents, abrasives and cleaners directly into wetlands.

Longer-term changes in wetland hydrology can result from increased rates of erosion and channelization, as well as alteration of species composition and increased accumulation of pollutants. These changes may adversely affect wetlands and riparian habitats, species, such as broad white-fish and salmon spawning and migration and, ultimately, alter ecosystems.

Specific concerns for the NPR-A

Bears—All three species of bears are found within the NPR-A. Polar bears, listed as Threatened under the Endangered Species Act, and brown bears are found within the Northeastern part of the NPR-A, including the Teshekpuk Lake and Colville River Special Areas. The coastal region of the NPR-A provides on-shore denning habitat for polar bears, and it was proposed by the USFWS as critical habitat, though litigation has clouded this designation. Polar and brown bears are dependent upon unfragmented habitat, food availability and low levels of human disturbance. Roads in the northeastern NPR-A would affect these factors as well as bear behavior, specifically through habitat fragmentation, impacts to travel corridors, and increasing human access. For brown bears, roads in the northeastern NPR-A may also impact species that are important food sources. Human-bear conflicts will likely increase with permanent road development, because roads could allow greater access to important bear habitat, including denning areas.

Caribou—Temporary snow or ice roads and permanent roads in the northeast region of the NPR-A have the potential to fragment important habitat for the Teshekpuk Lake Caribou Herd, including migratory corridors, winter, insect relief, and calving habitat. Studies in Canada and Alaska have indicated that roads can affect caribou in many ways. Impacts from roads within the NPR-A may be confounded for the unique Teshekpuk Herd, as, unlike other caribou herds, it mostly does not migrate outside of Alaska's western Arctic region. Because the Teshekpuk Caribou Herd remains in the western Arctic year-round, it is the most important herd for subsistence in Alaska's western Arctic communities.

Pacific Brant—An increasing number of Brant are nesting in Alaska's Arctic region and molting in coastal areas north of Teshekpuk Lake, in the Teshekpuk Lake Special Area. Brant are very sensitive to disturbance, especially while molting and flightless, and the increased activity a road would bring is likely to significantly affect this bird, as well as many other waterfowl and shorebirds that use this area. Brant are a very important subsistence resource.

Broad White Fish—Roads in the NPR-A likely would cross numerous streams and wetlands utilized by broad white fish and would likely destroy some of this habitat. A road would also increase sediment loads, and alter flows and water temperatures, which could affect broad white fish productivity and survival rates.

Bottom line: Roads result in significant impacts to most habitats, and particularly to sensitive, wetlands habitat.

For more information contact: Nicole Whittington-Evans, Alaska Regional Director, The Wilderness Society Alaska Regional Office, 907-351-8844, nicolewe@twso.org.

Appendix C:

Tools that BLM can use to increase the durability of
mitigation on public lands

**AGREEMENT BY AND BETWEEN
THE UNITED STATES BUREAU OF LAND MANAGEMENT AND
THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

A. STATEMENT OF PURPOSE

The Bureau of Land Management (BLM) and the California Department of Fish and Wildlife (CDFW) agree to work with each other to conserve biological and natural resources on federal public lands administered by the BLM within California. The BLM and CDFW have developed this agreement (Agreement) for the purpose of memorializing and making specific their cooperation and coordination to protect and conserve fish, wildlife, plants and their habitat within California. This Agreement supplements the MOU by and between the Bureau of Land Management and the California Department of Fish and Game, entered into by BLM and CDFW on November 27, 2012.

B. STATEMENT OF AUTHORITIES

The BLM and CDFW each have specific administrative responsibility or regulatory authority under Federal and state statutes. These statutes direct them, in part, to take into consideration biological and natural resources within the state, including certain species of concern and their habitats, and adverse effects resulting from federal, state, and private land use and development actions. These statutes include but are not limited to:

1. BLM. The Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. § 1701 et seq.); the Omnibus Public Lands Management Act of 2009 (OPLMA), Pub. L. 111-11, March 30, 2009; the Consolidated Appropriations Act of 2012, Pub. L. 112-74, December 23, 2011; the Endangered Species Act of 1973, Sec. 2 (c)(1) and Sec. 7(a)(1) and (2) (ESA); the Sikes Act of 1974, 16 U.S.C. § 670g-o; the National Environmental Policy Act of 1969, 42 U.S.C. § 4321 et seq. (NEPA); Recreation and Public Purposes Act, 43 U.S.C. § 869, et seq. (RPPA); and 43 C.F.R. Part 24, Department of the Interior Fish and Wildlife Policy: State-Federal Relationships.
2. CDFW. The California Endangered Species Act, Fish and Game Code § 2050, et seq. (CESA); the Natural Community Conservation Planning Act, Fish and Game Code § 2800, et seq. (NCCPA); Fish and Game Code § 1600, et seq. (Section 1600), the Native Plant Protection Act, Fish and Game Code § 1900, et seq. (NPPA); Fish and Game Code §§ 3511, 4700, 5050, and 5515; Fish and Game Code §§ 3503, 3503.5, and 3513; Fish and Game Regulations, Title 14, Cal. Code Regs.; Fish and Game Code § 1802; and the California Environmental Quality Act, Public Resources Code § 21000, et seq. (CEQA).

C. PROCEDURES AND RESPONSIBILITIES OF THE BLM AND CDFW

1. BLM Conservation Lands. The BLM manages federal public land within California. Some of this land is managed under some form of conservation protection, including: (i) legislatively and legally protected areas, such as Wilderness Areas, Wilderness Study Areas, and Wild and Scenic River designations; (ii) lands designated as part of the National Landscape Conservation System (NLCS); and (iii) lands administratively designated as Areas of Critical Environmental Concern (ACECs) and Wildlife Allocations. Some lands are subject to overlapping designations for wildlife and non-wildlife conservation goals. Collectively, lands with these designations are referred to herein as “BLM Conservation Lands.”
2. CDFW Compensatory Mitigation Requirements. In administering CESA, the NCCPA, Section 1600, and CEQA, CDFW routinely imposes upon individual project permittees the requirement to provide compensatory mitigation for take of or impacts to fish, wildlife, plants, and their habitat. Typically, CDFW requires a permittee to provide for the permanent protection and management of habitat by either purchasing credits at a mitigation bank, purchasing a conservation easement on private land, or purchasing private land and protecting it with a conservation easement. Although compensatory mitigation is usually completed on private land, CDFW is committed to ensuring that permittees seeking to satisfy compensatory mitigation requirements identify and protect the highest quality habitat available, regardless of whether that occurs on private or public lands. In designing appropriate mitigation for any given project, CDFW also seeks to locate mitigation where it will best offset the specific types of adverse effects from the project, whether that is on public or private land.
3. Importance of BLM Conservation Lands to Conservation in California. Both the BLM and CDFW recognize that many BLM Conservation Lands include critically important habitat for CESA-listed species, fully protected species, and other species of special concern in California. BLM Conservation Lands often include areas essential for ecological connectivity between natural landscape blocks and between wildlife populations. BLM Conservation Lands can also serve to prevent habitat fragmentation and to contribute to the protection, enhancement, restoration, or expansion of natural landscape blocks to maintain functionality of habitats for the covered species and thus to contribute to the stability and long-term viability of wildlife populations.
4. Use of BLM Conservation Lands to Satisfy CDFW Compensatory Mitigation Requirements. Using BLM Conservation Lands to contribute toward satisfaction of compensatory mitigation requirements for projects permitted by CDFW benefits: (1) CDFW by facilitating its permitting process; (2) BLM by providing funding and staffing

for restoration and enhancement work on BLM Conservation Lands; and (3) both agencies by helping fulfill their mutual goal of protecting and conserving fish, wildlife, plants and their habitat within California.

a. Compensatory Mitigation Actions. Compensatory mitigation actions that may be undertaken on BLM Conservation Lands include, but are not limited to:

- i. Fencing highways, freeways, and primary county roads;
- ii. Removing, restoring, or rehabilitating closed roads;
- iii. Removing illegal dumps;
- iv. Removing or controlling invasive or exotic plant infestations;
- v. Predator control actions;
- vi. Improving habitat connectivity by increasing the size of existing culverts, increasing the number of culverts, or constructing alternative means of crossings;
- vii. Additional law enforcement patrols;
- viii. Restoration of habitat and corridors;
- ix. Acceptance of the relinquishment of grazing permits or leases to make the land available for mitigation by allocating the forage permanently to wildlife use pursuant to the Consolidated Appropriations Act of 2012;
- x. Creating artificial nests or burrow sites;
- xi. Fencing between grazing lands and wildlife habitat lands;
- xii. Developing water sources for wildlife; and
- xiii. Increasing education outreach (e.g., interpreters, handouts, kiosks, signs).

b. Land Use Authorizations for Compensatory Mitigation. The following land use authorizations are available and may be approved and granted by the BLM to authorize CDFW-required compensatory mitigation actions on BLM Conservation Lands:

- i. Rights-of-way pursuant to 43 U.S.C. § 1761, et seq.;
- ii. Permits, leases, or easements pursuant to 43 U.S.C. § 1731, et seq., and 43 C.F.R. § 2920;
- iii. Leases pursuant to the Recreation and Public Purposes Act, 43 U.S.C. § 869, et seq. (RPPA); and
- iv. Terms and conditions on such land use authorizations that are necessary to meet state permitting or compensatory mitigation requirements;

The BLM may also recommend that the Secretary of the Interior exercise authority under 43 U.S.C. § 1714 to make withdrawals.

- c. Cooperative Agreements between the BLM and CDFW. In addition to the land use authorizations discussed above, the BLM and CDFW may enter into one of the following types of cooperative agreements to protect BLM Conservation Lands used to satisfy CDFW compensatory mitigation requirements:
 - i. Site-specific cooperative agreements for management pursuant to 43 U.S.C. § 1737(b); or
 - ii. Site-specific Sikes Act Agreements pursuant to the Sikes Act of 1974, 16 U.S.C. § 670g-o.
5. Coordination between BLM and CDFW With Respect to State-Recognized Compensatory Mitigation on BLM Conservation Lands.
- a. Notice. CDFW will inform the applicable BLM Field Office Manager in writing if it identifies BLM Conservation Lands that may be suitable to serve as compensatory mitigation for a project subject to CDFW permitting under CESA, the NCCPA, Section 1600, or CEQA. BLM will inform the applicable CDFW Regional Manager in writing if it identifies BLM Conservation Lands that may be suitable to serve as compensatory mitigation for CDFW permitting purposes.
 - b. Meet and Confer. Upon receipt of a written notice initiated by either agency pursuant to this section, the BLM and CDFW will meet within thirty (30) days to discuss whether the applicable BLM Conservation Lands possess the appropriate biological characteristics, land use designations, and other attributes to make the lands suitable to serve as compensatory mitigation for CDFW permitting purposes and for BLM land use management purposes.
 - c. CDFW Determination. Consistent with its authority and discretion under CESA, the NCCPA, Section 1600, and CEQA, CDFW will make the final determination as to whether protection of BLM Conservation Lands will satisfy compensatory mitigation requirements under permits or approvals issued by CDFW pursuant to these laws and accompanying regulations.
 - d. BLM Determination. Consistent with its authority and discretion under FLPMA, the BLM will make the final determination as to whether management actions or authorizations on BLM Conservation Lands to provide for compensatory mitigation consistent with CDFW compensatory mitigation requirements may be implemented consistent with the requirements of Federal law, regulations, and BLM land use management purposes.

- e. BLM Conservation Lands Approved for CDFW Compensatory Mitigation. For the purposes of this Agreement, BLM Conservation Lands on which the BLM has decided to take management actions or authorized activities that contribute to satisfaction of CDFW compensatory mitigation requirements, and which CDFW accepts for a particular permit or authorization, shall be called “BLM Conservation Lands Approved for CDFW Compensatory Mitigation.”
6. Consideration of Management Actions and Authorizations for BLM Conservation Lands to Contribute to CDFW Compensatory Mitigation Requirements. With respect to BLM Conservation Lands proposed to contribute to satisfaction of CDFW compensatory mitigation requirements, the BLM and CDFW further agree as follows:
- a. Once a land area is identified under Section C.5, BLM and CDFW will work together to identify and evaluate the specific management actions and authorizations, consistent with BLM’s land management authority defined by Federal law, regulations, and policy, which address CDFW goals for Compensatory Mitigation and are sufficient to contribute to meeting CDFW permitting requirements. In considering the specific management actions and authorizations, the BLM will take into account the duration of the impacts that are proposed to be mitigated through protection of the BLM Conservation Lands and will seek to secure the mitigation benefits for the duration of the impacts to the extent consistent with Federal law, regulations, and policy. For purposes of this Agreement, the duration of the impacts includes the duration of the project permitted by CDFW, decommissioning, and the restoration of the site sufficient to restore the biological functions to a level sufficient to provide habitat functions for the species in the affected area.
 - b. The BLM and CDFW shall consider the use of site-specific Sikes Act Agreements and Cooperative Agreements for Management for BLM Conservation Lands considered for compensatory mitigation purposes.
 - c. In addition to, or as an alternative to, entering into any Sikes Act Agreement or a Cooperative Agreement for Management, CDFW, or a third party capable of meeting the required terms and conditions, may request the BLM to consider one or more of the land use authorizations listed in Section C.4.b. to secure protection of BLM Conservation Lands. If the BLM issues to CDFW a land use authorization for compensatory mitigation purposes pursuant to this Agreement, CDFW will ensure that its employees and agents comply with the terms and conditions of that authorization. If the BLM issues to a third party a land use authorization for compensatory mitigation purposes pursuant to this Agreement,

the BLM and CDFW will work together to develop processes to monitor compliance with the terms and conditions of that land use authorization. CDFW will notify the BLM of any proposed activity on BLM Conservation Lands Approved for Compensatory Mitigation that has the potential to impact BLM-managed resources, biological or otherwise, and to obtain the appropriate BLM-approval prior to commencing that activity.

- d. BLM will manage BLM Conservation Lands Approved for Compensatory Mitigation in a manner that is consistent with the land use designations, management actions and authorizations (e.g., NLCS, ACEC, Wildlife Allocation, etc.) applicable to those lands, in accordance with Federal law, regulations, and policy and the terms and conditions of any completed instrument prepared under the terms of this agreement (see Section C.5.) for the term of the instrument, including any amendments or extensions to that term, so long as CDFW continues to recognize its compensatory mitigation value.
- e. To the maximum extent consistent with Federal law, regulations, and policy, BLM will seek to design Section C.5. instruments and maintain the land use designations on BLM Conservation Lands Approved for Compensatory Mitigation for the duration of the impacts. BLM will confer with CDFW at least ninety (90) days prior to initiating any action to amend or otherwise change the land use designations (e.g., NLCS, ACEC, Wildlife Allocation, etc.) on the BLM Conservation Lands Approved for Compensatory Mitigation. Both the BLM and CDFW acknowledge that the BLM may need to amend its land use plans and that such amendments could affect land use designations and land management practices. Consistent with Federal law and regulation, the BLM intends that any subsequent land use plan amendments will protect the biological values on BLM Conservation Lands Approved for CDFW Compensatory Mitigation to a level sufficient to meet those CDFW requirements for compensatory mitigation.
- f. If a third-party applicant proposes a project on BLM Conservation Lands Approved for CDFW Compensatory Mitigation, the application will be subject to the applicable land use plan, land use designations, and any valid existing rights (including previously-issued land use authorizations listed in Section C.4.b. and cooperative agreements listed in Section C.4.c.).
- g. If the BLM receives an application for a project on BLM Conservation Lands Approved for CDFW Compensatory Mitigation and subject to one of the land use authorizations listed in Section C.4.b. or agreements listed in Section C.4.c., the BLM will inform the third-party applicant proposing to develop those lands of the

extent of the existing use as compensatory mitigation, both temporally and spatially, prior to processing an application for a right-of-way or other authorization for development or use. Before approving any such application:

- i. The BLM will confer with CDFW to discuss whether and to what extent granting the application would impair or be inconsistent with the mitigation value of the lands, and whether alternative mitigation for those values is available.
- ii. The BLM will invite CDFW to be a Cooperating Agency under NEPA for purposes of the application for actions requiring an EIS-level analysis. CDFW may request Cooperating Agency status for other NEPA actions, such as Environment Assessment-level analysis.
- iii. The BLM, considering the commitment to mitigation value of the lands in question, will either:
 1. Deny the proposed project based on inconsistency with the Land Use Plan and commitments already made for compensatory mitigation without further analysis, or
 2. Propose an alternative for analysis that considers appropriate means of limiting impairment or inconsistency with the mitigation values, or
 3. Include an alternative in any further analysis (no action) that would deny the proposed project.
- iv. The BLM, when issuing a decision on the proposed project, will document the following:
 1. The basis for approving or denying the proposed project or requiring any additional mitigation measures or design features,
 2. Site-specific factors from the analysis that support whether to approve, approve with modifications, or deny any such application.
 3. If the BLM approves the proposed project, how compensatory mitigation values on the lands previously relied upon by CDFW as contributing to its mitigation requirements for specific projects are sustained; and
 4. If BLM approves the proposed project, how mitigation values addressed in (i) CESA's requirement for full mitigation of impacts to state-listed species as set forth in Fish and Game Code section 2081(b), (ii) Section 1600's requirement for "reasonable measures necessary to protect the [fish and wildlife] resource" as set forth in Section 1603, (iii) the NCCPA's requirements for conservation and protection of habitat reserves as set forth in Fish and Game Code section 2820(a)-(b), and (iv) CEQA's requirement for "feasible

mitigation measures” that would substantially lessen significant environmental impacts as set forth in Public Resources Code section 21002 will be protected through appropriate terms and conditions on any subsequent rights-of-way granted or by other actions; and

5. Consistent with Title 43 U.S.C. Section 1765, that any subsequent right-of-way granted for use of any BLM Conservation Lands Approved for CDFW Compensatory Mitigation include terms and conditions that both “minimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment” and “require compliance with State standards for public health and safety, environmental protection, and siting, construction, operation, and maintenance of rights-of-way for similar purposes if those standards are more stringent than applicable Federal standards.” BLM will ensure that durability terms and conditions that integrate the state standards referenced above in Section C.6.g.iv.4, that have already been applied under a mechanism described above in Section C.4 and that CDFW has relied upon in the written record for a permit for partial or full satisfaction of mitigation requirements imposed by those provisions of state law, would not be affected by any subsequent right-of-way authorization unless the holder, the BLM and CDFW consent to a modification.
- v. If BLM expects to approve any such project, BLM will confer with CDFW before issuing a decision to discuss existing compensatory mitigation commitments, whether and to what extent granting the application would impair or be inconsistent with the mitigation value of the lands, the effectiveness of proposed alternative mitigation for those values, and the appropriate term or duration for any offsetting mitigation.. In the event the BLM approves an application or action on BLM Conservation Lands approved for compensatory mitigation purposes that impacts the values being mitigated for or makes that mitigation less effective, the BLM and CDFW will further confer to identify actions to offset any impacts to previously approved compensatory mitigation from the subsequently proposed project. Such offsetting actions may include, but are not limited to identifying, evaluating, and applying tools and actions on additional BLM Conservation Lands to provide durable, long-term assurances that they will be protected and managed. Prior to the BLM’s approval of a subsequently proposed project, the BLM and CDFW

will cooperate and coordinate to the maximum extent possible to achieve the goals of this Agreement.

- h. Projects proposed by the BLM on federal public lands will be subject to and consistent with the applicable land use plan, land use designations, and any valid existing rights (including land use authorizations listed in Section C.4.b. and cooperative agreements listed in Section C.4.c.), as well as Federal law, regulations, and policy. If the BLM is considering a project on BLM Conservation Lands approved for compensatory mitigation purposes, it will confer with CDFW as early as is feasible to design the project in a way that avoids or minimizes impacts to previously approved compensatory mitigation and follow the procedures set forth in Section C.6.g.

7. CDFW Considerations for BLM Conservation Lands Approved for CDFW Compensatory Mitigation. Consistent with the goals of this Agreement and its authority as defined in State law, regulations, and policy, and in acknowledgement of the importance of CDFW's management of wildlife, CDFW agrees to:

- a. Manage wildlife on BLM Conservation Lands Approved for CDFW Compensatory Mitigation in cooperation with the BLM in a manner that is consistent with the applicable land use plan, the land use designations, any applicable Section C.5. instrument, and the Department of the Interior Fish and Wildlife Policy (43 C.F.R. Part 24);
- b. Provide advice and counsel to the BLM with respect to wildlife management on BLM Conservation Lands Approved for CDFW Compensatory Mitigation; and
- c. Consistent with Section C.5.c, recognize the BLM Conservation Lands Approved for CDFW Compensatory Mitigation toward the mitigation requirements of those projects for which the BLM approved management actions or authorizations are made.

8. Notification.

- a. Notice to Holders of Land Use Authorizations for Mitigation Actions. The BLM and CDFW will provide written notification to the holder of any land use authorization for any compensatory mitigation action, as described in Section C.6.e., upon the BLM's receipt of an application for a right-of-way or other authorization, CDFW's receipt of an application for any permit or approval, or the initiation of any activity by the BLM or CDFW themselves if the application

received or activity proposed has the potential to affect the BLM Conservation Lands Approved for CDFW Compensatory Mitigation. Both the BLM and CDFW agree to meet in a timely manner with the holder of the land use authorization, if a meeting is requested by either BLM, CDFW or the holder of the land use authorization, to discuss the application or activity and its potential impact to the compensatory mitigation action.

- b. Annual Report on Project Approvals relating to BLM Conservation Lands Approved for CDFW Compensatory Mitigation. The BLM and CDFW shall provide each other with and make available to the public, on or before January 31 of each calendar year, a written account of all rights-of-way, permits, authorizations, and other approvals issued by the BLM or CDFW for projects and activities occurring on or potentially affecting BLM Conservation Lands Approved for CDFW Compensatory Mitigation during the prior calendar year.

9. Dispute Resolution.


- a. Dispute Resolution Process. The BLM and CDFW recognize that disagreements concerning implementation or interpretation of this Agreement may arise from time to time and agree to work together in good faith. In the event of such a disagreement, it is in the best interest of each agency to resolve the issue at the lowest possible level of each organization. The first level will involve the BLM Field Office Manager and the CDFW Environmental Program Manager. If resolution cannot be reached at that level, the next level will involve the BLM District Manager and CDFW Regional Manager. If resolution cannot be reached at that level, the next level will involve the BLM State Director and CDFW Director or Chief Deputy Director. Both agencies agree to make the appropriate individual or their representatives available within a reasonable timeframe to discuss the disagreement.
- b. Proposed BLM Land Use Plan Decisions. Title 43 CFR Section 1610.3-2(a) requires BLM land use plans to be consistent with officially approved or adopted resource related plans of state governments, so long as the land use plan decision is also consistent with the purposes, policies, and programs of Federal laws and regulations applicable to federal public lands. The BLM and CDFW will seek to reconcile applicable state and federal land use and wildlife management planning decisions wherever this agreement is applied.
- c. Final Determinations on Federal and State Law. Notwithstanding anything in this section, the BLM remains the final decision maker for interpretation and


implementation of applicable federal law, and CDFW remains the final decision maker for interpretation and implementation of applicable state law, to be applied on BLM-administered public land.

D. ADMINISTRATIVE PROVISIONS

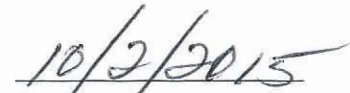
1. Effective Date. This Agreement is made and entered into as of the last date of signature by and between the BLM and CDFW.
2. Termination. Either the BLM or CDFW may terminate this Agreement by delivering to the other agency a written notice of intent to terminate at least ninety (90) days prior to the proposed termination date. Termination of this Agreement shall not affect any authorizations by BLM pursuant to Section C.6. of this Agreement. Notwithstanding any termination of this Agreement, the land use authorizations for compensatory mitigation lands shall continue to be subject to the terms and conditions of and law applicable to each individual authorization.
3. Amendment or Modification. This Agreement may be amended with the written agreement of the BLM and CDFW.
4. Applicability of State and Federal Law. Notwithstanding any other provision in this Agreement, nothing in this Agreement is intended to be nor shall it be interpreted to be inconsistent with any applicable Federal or state law or regulation.
5. Funding. This Agreement does not obligate any funds from either Agency. Subject to the availability of funds, the BLM and CDFW each agrees to fund its own expenses associated with this Agreement. Nothing contained in this Agreement shall be construed as obligating any Federal agency to any expenditure or obligation of funds in excess or advance of appropriations, in accordance with the Anti-Deficiency Act, 31 U.S.C. §1341.
6. Elected Officials Not to Benefit. No member of or delegate to Congress shall be entitled to any share or part of this Agreement, or to any benefit that may arise from it.
7. FACA. The BLM and CDFW will comply with the Federal Advisory Committee Act to the extent it applies.

U.S. BUREAU OF LAND MANAGEMENT




Signature


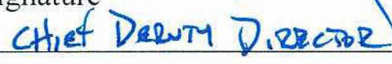
Title



Date

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE



Signature


Title



Date

Memorandum

Date: October 22, 2015

To: CDFW Leadership
CDFW Environmental Program Managers
CDFW Office of General Counsel

From: Kevin Hunting 
Chief Deputy Director

Subject: **Application of the 2015 Durability Agreement between Department of Fish and Wildlife and Bureau of Land Management**

Purpose

The purpose of this memorandum is to provide guidance to regional staff on the application of the 2015 Durability Agreement (DA) in the context of NCCP or Conservation Strategy development and for use with CESA Individual Take Permits Lake and Streambed Alteration Agreements, agreements under the Native Plant Protection Act (FGC 1900), and for mitigation requirements imposed through CEQA.

Background

Almost half of California is comprised of public lands making this land base an important component of effectively managing wildlife populations in the state. Of these public lands, the Bureau of Land Management (BLM) manages about 15 million acres, many of which are essential to the management, conservation, and recovery of declining species. The California desert in particular highlights the potential for BLM lands to contribute, in a lasting way, to endangered species management, conservation, and recovery.

Lands administered by the BLM are often integrated into regional landscape level plans like Natural Community Conservation plans (NCCP) and incorporated by local government into open space and green space planning. Similarly, BLM lands offer passive connectivity opportunities and corridors for wildlife movement, which buffer against climate change induced habitat changes. In short, BLM lands are already an important part of land-based conservation in California.

Under the Federal Land Policy and Management Act (FLPMA), the BLM has several available designations, as part of the land management planning process, that convey specific wildlife and habitat protection benefits on BLM land. These include Areas of Critical Environmental Concern (ACEC), Desert Wildlife Management Areas (DWMA), and more recently, a designation recognizing unique landscape values called National Landscape Conservation System (NLCS). While these designations are an important part of the conservation landscape on public lands, they are administrative in nature and, with the exception of NLCS lands, can therefore be modified or eliminated through the FLPMA Land Use Plan Amendment process. As a consequence, the duration of surface conservation values for sensitive species habitat on BLM land over time may vary considerably. Some land use planning designations may be sufficient

for providing assurances over time for general conservation purposes or as part of the conservation matrix or reserve network in an NCCP. However, these designations alone fall short of providing the perpetual benefits required as part of compensatory mitigation for an Incidental Take Permit (ITP) issued under the California Endangered Species Act (CESA) or as part of the permanent conservation commitment required for an NCCP. This limitation has put many important lands off limits as perpetual sensitive species habitat.

Beginning in 2012, DFW and BLM embarked on an effort to identify opportunities in existing law and regulation to remedy this situation. The manifestation of this initial effort was the November 27, 2012 Memorandum of Understanding between BLM and DFW (often referred to as the "Durability MOU"), which identified a series of tools that currently exist in federal law and regulation that could be utilized by BLM to extend (in time) the benefits of surface habitat values beyond what would typically be achieved through administrative and land use planning designations. The agreement focused on the California desert region and was catalyzed by the development of the Desert Renewable Energy Conservation Plan (DRECP). Now in 2015, DFW and BLM have re-published the MOU as a formal durability agreement with statewide applicability ("Durability Agreement" or "DA"). This Durability Agreement was executed on October 2, 2015 and became effective as of that date. In summary, the Durability Agreement supports the use of the following durability approaches:

Types of Durability Tools			
<i>Approach</i>	<i>Citation</i>	<i>Duration</i>	<i>Allowable Acreage</i>
Rights-of-Way	FLPMA, Title 43 U.S.C. § 1761, et seq.; Title 43 C.F.R. § 2800	Rights-of-way "shall be limited to a reasonable term in light of all circumstances concerning the project"	No limit.
Permits, Leases, or Easements	FLPMA, Title 43 U.S.C. § 1740, et seq.; Title 43 C.F.R. § 2920	Leases are limited to a term designated by BLM consistent with amortization of the capital investment. Permits are limited to 3 years. Easements are limited to a term designated by BLM.	No limit.
Withdrawals	FLPMA, Title 43 U.S.C. § 1714	The Secretary of the Interior may authorize withdrawals of up to 5000 acres "for such period of time as he deems desirable for a resource use" and for up to 20 years for any other use. Congress may authorize withdrawals exceeding 5000 acres for up to 20 years.	The Secretary of the Interior may authorize withdrawals of up to 5000 acres. Withdrawals exceeding 5000 acres must be approved by Congress.

Application of the 2015 Durability Agreement
between Department of Fish and Wildlife and
Bureau of Land Management
October 22, 2015
Page 3

<i>Approach</i>	<i>Citation</i>	<i>Duration</i>	<i>Allowable Acreage</i>
Leases	Recreation and Public Purposes Act, Title 43 U.S.C. § 869, et seq.; Title 43 C.F.R. § 2740, et seq.	All purchases are permanent. Leases for state agencies are limited to 25 years. Leases for non-profits are limited to 20 years.	A state may purchase up to 6400 acres annually for recreation and up to 640 acres annually for each public purpose other than recreation; non-profits may purchase up to 640 acres annually for recreation and an additional 640 acres for all other purposes. There is no limit to the amount of land that may be leased.
Sikes Act Agreements and accompanying HMPs	Sikes Act of 1974, Title 16 U.S.C. § 670g-o.	Indefinite term.	No limit.
Cooperative Agreements for Management	FLPMA, Title 43 U.S.C. § 1737(b).	Indefinite term.	No limit.
Relinquishment of Grazing Leases	Omnibus Public Lands Management Act of 2009, Public Law 111-11, March 29, 2009; Consolidated Appropriations Act of 2012, Public Law 112-74, December 23, 2011.	Permanently allocates the forage to wildlife use	No limit.

Policy

It is the policy of DFW to consider use of one or more of the durability tools described in the DA consistent with the following principles:

General Provisions

The decision to authorize use of a DA tool on BLM lands is within the BLM's authority, while the decision to credit use of a DA tool for state compensatory mitigation purposes is within DFW's authority. As a result, any decision to use a DA tool for compensatory mitigation or other uses must involve the collaboration and agreement of both the BLM and DFW. DFW will need to engage counties and cities when they are acting as CEQA lead agencies to ensure that the CEQA document's discussion of

the use of DA tools, if any, accurately reflects the decisions by the BLM and CDFW as to whether a DA tool is appropriate in the context of the project at hand.

Conservation Planning and Connectivity Applications

- 1) Generally, the DA and associated tools are intended for and best suited for application to support conservation for large projects or planning efforts. As such, when used in this context, they must be compatible with the planning scale, support recovery of declining and vulnerable species, and be consistent with existing conservation strategies and plans.
- 2) For conservation planning applications, application of the DA tools on BLM land would complement or complete a connectivity, linkage, or climate change adaptation requirement for an NCCP.
- 3) Use of the DA tools should be consistent with our Policy on Publicly Owned, Department Owned, and Conserved Lands.
<http://dfgintranet/Portal/LinkClick.aspx?fileticket=gbRoFNDx19g%3d&tabid=802>

Compensatory Mitigation Applications

- 1) Use of the DA tools to meet state requirements as part of a compensatory mitigation package is at that sole discretion of DFW. Application of any of these tools does not change existing obligations and requirements under CESA or its implementing regulations for authorizing incidental take, meeting the CESA full mitigation standard, or implementing CESA policy or practice. Similarly, application of a durability tool does not change any other existing statutory or regulatory requirements relating to mitigation lands and funding, including the provisions of Government Code Sections 65965-65968 (SB 1094) and Probate Code Sections 18501-18510 (Uniform Prudent Management of Institutional Funds Act) relating to endowments.
- 2) DA tools should be applied only after all minimization and avoidance measures are employed.
- 3) The BLM lands which would be the target of DA tool application support habitat values important to achieving the goals of the desired action (e.g., present the best conservation outcome for the target species or resource value).
- 4) Use of the DA tools, either exclusively or in conjunction with private land actions such as an easement, will result in a better conservation outcome for the target species than if the mitigation was achieved by other means.
- 5) DFW should always select the tool that would result in protection of target biological values over the longest time span and, at a minimum, for the duration of the impacts, including restoration of an impacted site.
- 6) Whenever possible, DFW should seek to employ a third party when using these tools to be party to the rights in the agreement, hold compensatory mitigation funds, and, at DFW's discretion, oversee implementation and monitoring.
- 7) Use of the DA tool tools should be consistent with our Policy on Publicly Owned, Department Owned, and Conserved Lands.
<http://dfgintranet/Portal/LinkClick.aspx?fileticket=gbRoFNDx19g%3d&tabid=802>

- 8) The Durability Agreement and the tools incorporated into the agreement are intended to provide additional flexibility for DFW as it considers both regulatory and non-regulatory approaches to land-based conservation across the California landscape. Application of the DA is specific to individual project and planning circumstances and is not intended to replace more traditional conservation easement approaches to perpetual conservation.

In its simplest terms, application of specific element(s) of the Durability Agreement should take into account the importance of conservation of a target species, natural community, or other conservation elements on BLM land and the acknowledgement that the conservation values may not be guaranteed in perpetuity. As stated above, in some cases land-based conservation for species recovery or to match the values lost from a given impact (compensatory mitigation) would strongly implicate federal lands as the best approach because the federal lands support the best remaining values for the target conservation element. In this case, application of a DA tool that provided the best and most durable conservation would be warranted. However, even in cases where BLM lands may offer the best conservation option, compensatory mitigation on BLM lands alone may not be sufficient to satisfy CESA mitigation standards, and it would be appropriate to consider a multi-faceted mitigation package that would include both use of a DA tool and other, more traditional mitigation actions.

On the other hand, federal lands that are part of a larger reserve design complex that does not involve a state regulatory action (compensatory mitigation) and is being considered as part of public conservation investment might not require additional durability beyond existing BLM designations. Within the context of the NCCP Act, some level of durability beyond existing BLM designations may be warranted to provide the basis for natural community conservation findings related to permanent conservation.

Staff considering use of DA tools for conservation and/or mitigation actions should work with HQ (HCPB Branch Chief) in developing the necessary agreements and to track their progress.